ORDER NO. VSD9611MG01B
D5/D15

Service Manual

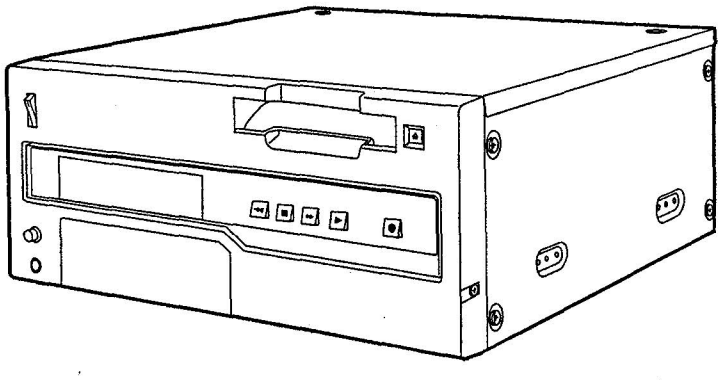
DVCPRO

Volume 2

Sec. 1 *Block Diagrams*
Sec. 2 *Schematic Diagrams*
Sec. 3 *Circuit Board Diagrams*

Digital Video Cassette Recorder

AJ-D650P
AJ-D640P



Please refer to the Service Manual Volume 1 (order No. VSD9611MG01A) for operating instructions, service information, maintenance & mechanical adjustments, electrical adjustments and exploded views & replacement parts lists.

Panasonic®

© 1996 Matsushita Electric Industrial Co., Ltd. All rights reserved.
Unauthorized copying and distribution is a violation of law.

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advice non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service manual by anyone else could result in serious injury or death.

INTRODUCTION

This service manual contains technical information which will allow service personnels to understand and service the DVCPRO Studio VTR AJ-D650P/D640P.

If the part or circuit is changed or modified, this information will be followed by supplementary service manual to be filed with original manual.

Specifications

GENERAL

Power supply:	AC 120 V±10%, 50 – 60 Hz
Power consumption:	150 W

Operating ambient temperature:	41°F to 104°F (5°C to 40°C)
Operating ambient humidity:	10% to 90% (no condensation)
Weight:	35.2 lbs (16 kg)
Dimensions (W×H×D):	16-3/4×6-15/16×16-3/8 inches (424×175×415 mm)
Recording format:	DVCPRO format
Recording tracks:	Digital video **Time code** Recorded in sub-code area **Digital audio** 2channels **Cue Track** 1 track **Control (CTL)** 1 track
Tape speed:	33.820 mm/sec
Recording time:	General purpose cassette; Max. 123 minutes News-gathering cassette; Max. 63 minutes
Tape:	1/4-inch thin magnetic layer metal tape
FF/REW time:	Less than 3 min (with general purpose cassette) Less than 2 min (with news-gathering cassette)
Search speed:	0 to ±60× normal speed (color)
Digital slow motion:	+0.75× normal speed in + direction –0.43× normal speed in – direction
Editing accuracy:	±0 frame (using time code)
Tape timer accuracy:	±1 frame (using continuous CTL signal)
Servo lock time:	Less than 0.5 sec. (color framing/ standby ON)

VIDEO

(Digital video)

Sampling frequencies:	Y: 13.5 MHz/P_B, P_R: 3.375 MHz
Quantizing:	8 bits
Error correction:	Reed-Solomon product code

(Digital IN/analog component OUT)

Video bandwidth:	Y: 30 Hz to 5.5 MHz (±1.0 dB) P_B, P_R: 30 Hz to 1.0 MHz (±1.0 dB)
S/N ratio:	Better than 60 dB
K factor:	Less than 2%

(Analog component IN/component OUT)

Video bandwidth:	Y: 30 Hz to 5.5 MHz (–1.5 dB to +1.0 dB) P_B, P_R: 30 Hz to 1.0 MHz (–2.0 dB to +1.0 dB)
S/N ratio:	Better than 55 dB
K factor:	Less than 2%

(Analog composite IN/composite OUT)

Video bandwidth:	Y: 30 Hz to 4.5 MHz (–1.5 dB to +1.0 dB)
Y/C delay:	Better than 20 ns
K factor:	Less than 3%

(Video input connector)

Analog component input:	BNC×3 (Y, P_B, P_R) Y: 1.0 Vp-p, 75Ω P_B, P_R: 0.486/0.7 Vp-p switchable, 75Ω (75% color bar, 7.5% setup)
Analog composite input:	BNC×2, loop-through, 75Ω on/off
S VIDEO input:	S terminal (4-pin)×1 Y: 1.0 Vp-p, 75Ω C: 0.286 Vp-p (burst), 75Ω
Reference input:	Analog composite BNC×2, loop-through, 75Ω on/off
Serial digital component input (option):	Complies with SMPTE259M-C standard, BNC×2, active through

(Video output connector)

Analog component output:	BNC×3 (Y, P_B, P_R) Y: 1.0 Vp-p, 75Ω P_B, P_R: 0.486/0.7 Vp-p switchable, 75Ω (75% color bar, 7.5% setup)
Analog composite output:	BNC×3 Video1/video2/video3 (superimpose on/off)
S VIDEO output:	S terminal (4-pin)×1 Y: 1.0 Vp-p, 75Ω C: 0.286 Vp-p (burst), 75Ω
Serial digital component output (option):	Complies with SMPTE259M-C standard, BNC×3

(Video signals adjustment)

Video output gain:	±3 dB	Control from ENCODER REMOTE connector
Video output chroma gain:	±3 dB	
Video output hue:	±30°	
Video output setup:	±15 IRE	
Video output sync phase:	±2 μs	
Video output SC phase:	±180°	

AUDIO

(Digital audio)

Sampling frequencies:	48 kHz
Quantizing:	16 bits
Frequency response:	20 Hz to 20 kHz (–1.0 dB to +0.5 dB)
Dynamic range:	Better than 86 dB (1 kHz, emphasis OFF, "A" weighted)
Distortion:	Less than 0.1% (1 kHz, emphasis OFF, standard level)
Crosstalk:	Less than –80 dB (1 kHz, between 2 channels)
Wow & flutter:	Below measurable limits
Headroom:	20 dB
De-emphasis:	T1=50 μs/T2=15 μs (on/off automatic)

(Cue track)

Frequency response:	300 Hz to 6 kHz ±3 dB

(Audio input connector)

Analog input (CH1/CH2):	XLR×2, 600Ω/high impedance selectable, +4/0/–20/–60 dBu
Digital input (CH1/CH2) (option):	BNC×1, AES/EBU format
Serial digital input (option):	Complies with SMPTE259M-C, 272M standard (BNC)

(Audio output connector)

Analog output (CH1/CH2):	XLR×2, low impedance, +4/0/–20 dBu
Digital output (CH1/CH2) (option):	BNC×1, AES/EBU format
Serial digital output (option):	Complies with SMPTE259M-C, 272M standard (BNC)
Monitor output:	Phono×1, 600 Ω, –8 dBV
Headphones:	Variable level, 1/4" phone, 8Ω

Other input/output connector

Time code input:	BNC×1, 0.5 to 8 Vp-p
Time code output:	BNC×1, 2.0 Vp-p
RS-422A input/output:	D-sub 9-pin, RS-422A interface
RS-232C:	D-sub 25-pin, RS-232C interface
Encoder remote:	D-sub 15-pin

Weight and dimensions when shown are approximately.
Specifications are subject to change without notice.

SAFETY PRECAUTIONS

GENERAL GUIDELINES

1. When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
2. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
3. After servicing make the following leakage current checks to prevent the customer from being exposed to shock hazards.

LEAKAGE CURRENT COLD CHECK

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. Measure the resistance value, with an ohm meter, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwheads, connectors, control shafts, etc. When the exposed metallic part has a return path to the chassis, the reading should be between 1 MΩ and 5.2MΩ .
   When the exposed metal dose not have a return path to the chassis, the reading must be ∞ .

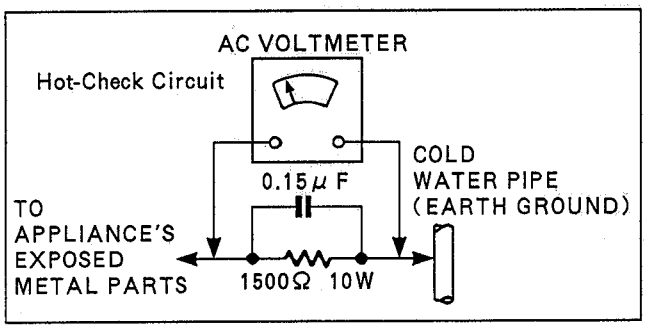


Figure 1

LEAKAGE CURRENT HOT CHECK (See Figure 1)

1. Plug the AC cord directly into the AC outlet.
   Do not use an isolation transformer for this check.
2. Connect a 1.5KΩ , 10W resistor, in parallel with 0.15μ F capacitor, between each exposed metallic part on the set an a good earth ground such as a water pipe, as shown in Figure 1.
3. Use an AC voltmeter, with 1000 ohms/volt or more sensitivity, to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverse the AC plug in the AC outlet repeat each of the above measurements.
6. The potential at any point should not exceed 0.75 volts RMS. A leakage current tester (Simpson Model 229 equivalent) may be used to make the hot checks, leakage current must not exceed 1/2 milliamp. In case a measurement is outside of the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.

ELECTROSTATICALLY SENSITIVE (ES) DEVICES

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground.
   Alternatively, obtain and wear a commercially available discharging wrist strap device, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static solder removal device classified as "anti-static" can generate electrical charges sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.
   CAUTION: Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless mother such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ES device).

X-RADIATION

WARNING

1. The potential source of X-Radiation in EVF sets is the High Voltage section and the picture tube.
2. When using a picture tube test jig for service, ensure that jig is capable of handling 10kV without causing X-Radiation.

NOTE: It is important to use an accurate periodically calibrated high voltage meter.

3. Measure the High Voltage. The meter (electric type) reading should indicate 2.5kV, ± 0.15kV. If the meter indication is out of tolerance, immediate service and correction is required to prevent the possibility of premature component failure. To prevent an X-Radiation possibility, it is essential to use the specified picture tube.

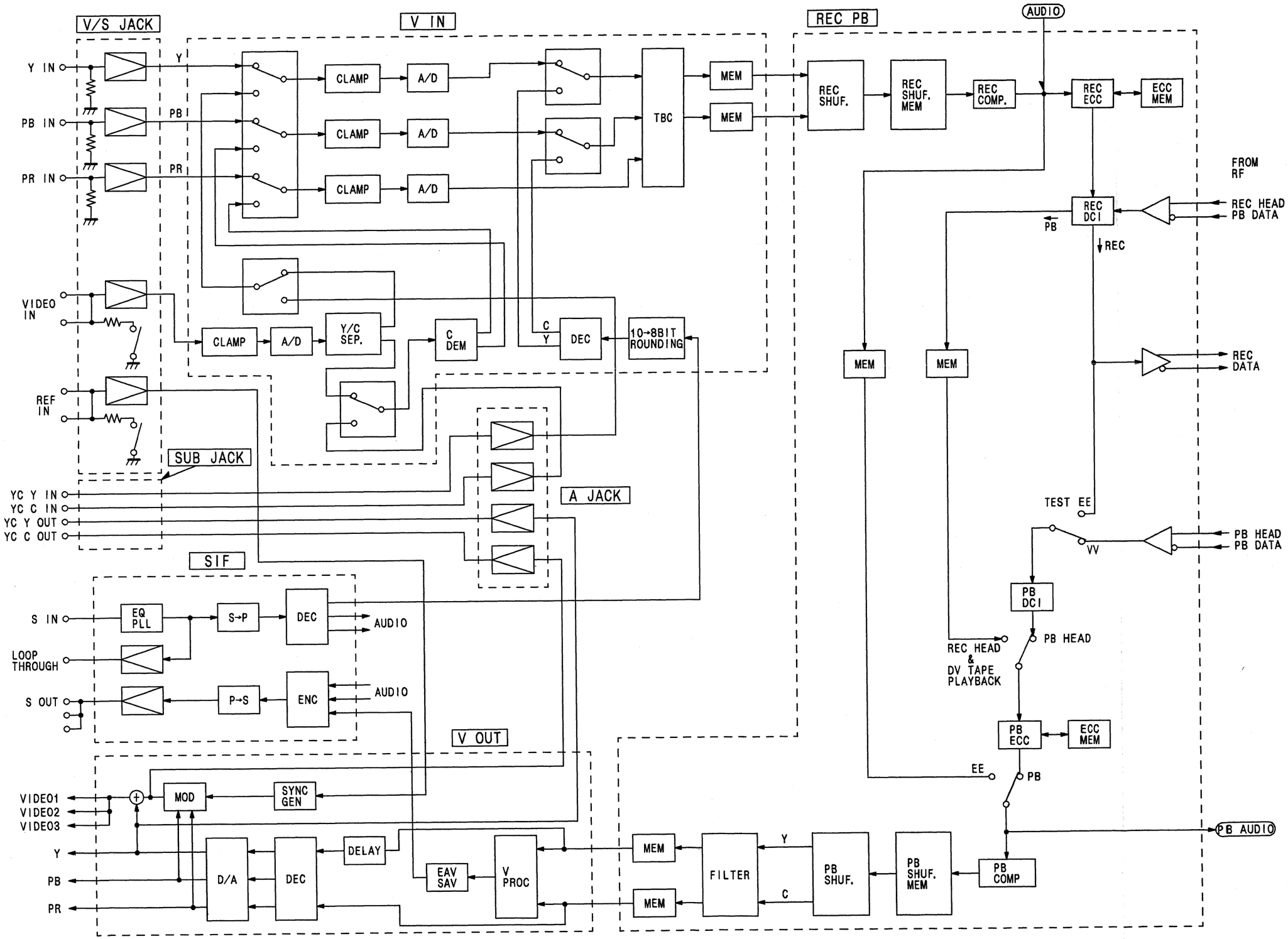
SECTION 1

BLOCK DIAGRAMS

CONTENTS

VIDEO OVERALL 1-1
AUDIO OVERALL 1-2
RF OVERALL 1-3
F1 SERVO 1-4
F2 SYSCON 1-5
F4 V OUT (1/2) 1-6
F4 V OUT (2/2) 1-7
F5 REC PB 1-8
F6 V IN 1-9
F7 A PROC 1-10
F8 ADDA CUE (1/2) 1-11
F8 ADDA CUE (2/2) 1-12
H3 EQ 1-13
H4 RF AMP 1-14
HEAD BUFFER 1-15

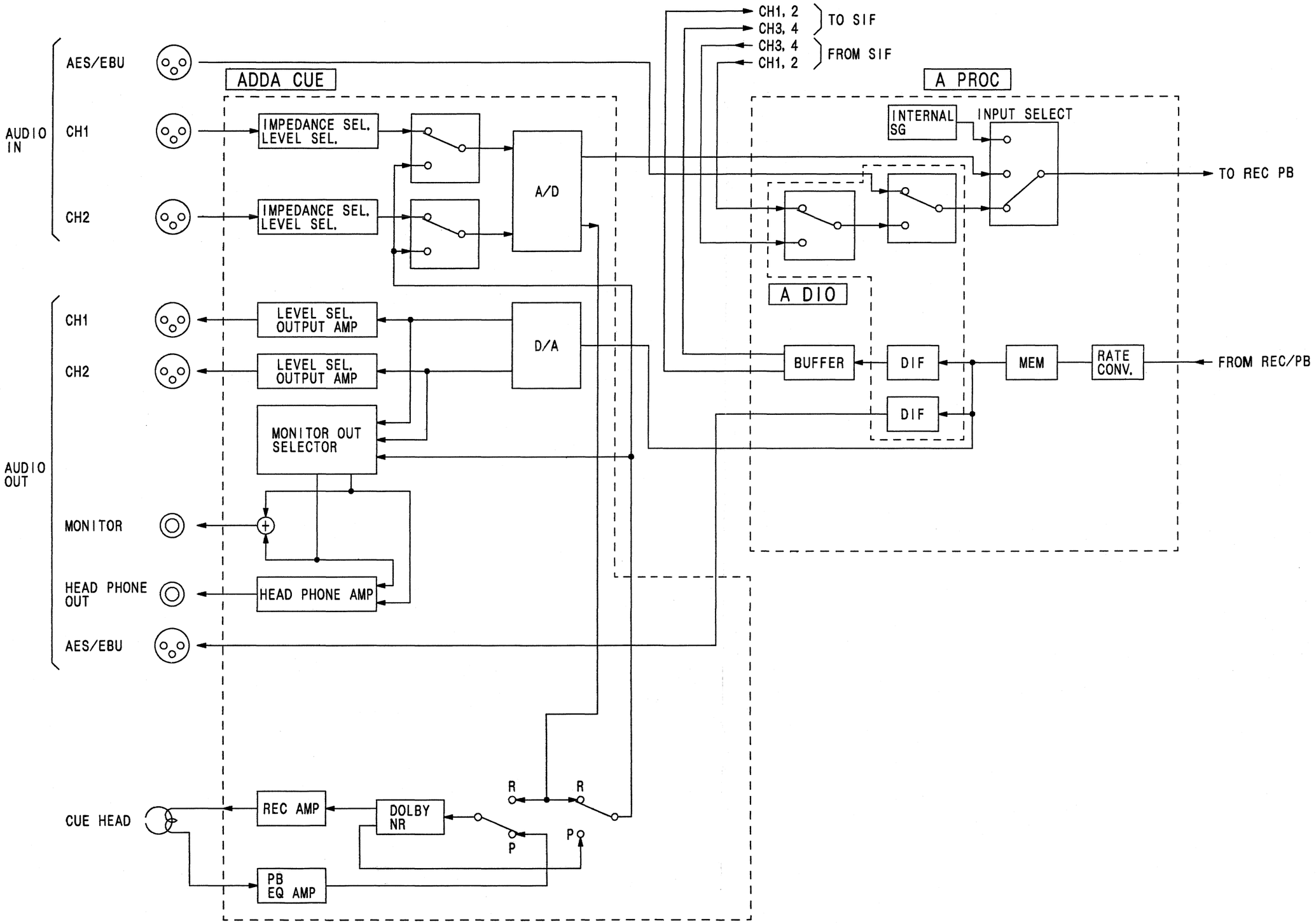
VIDEO OVERALL BLOCK DIAGRAM



1—1

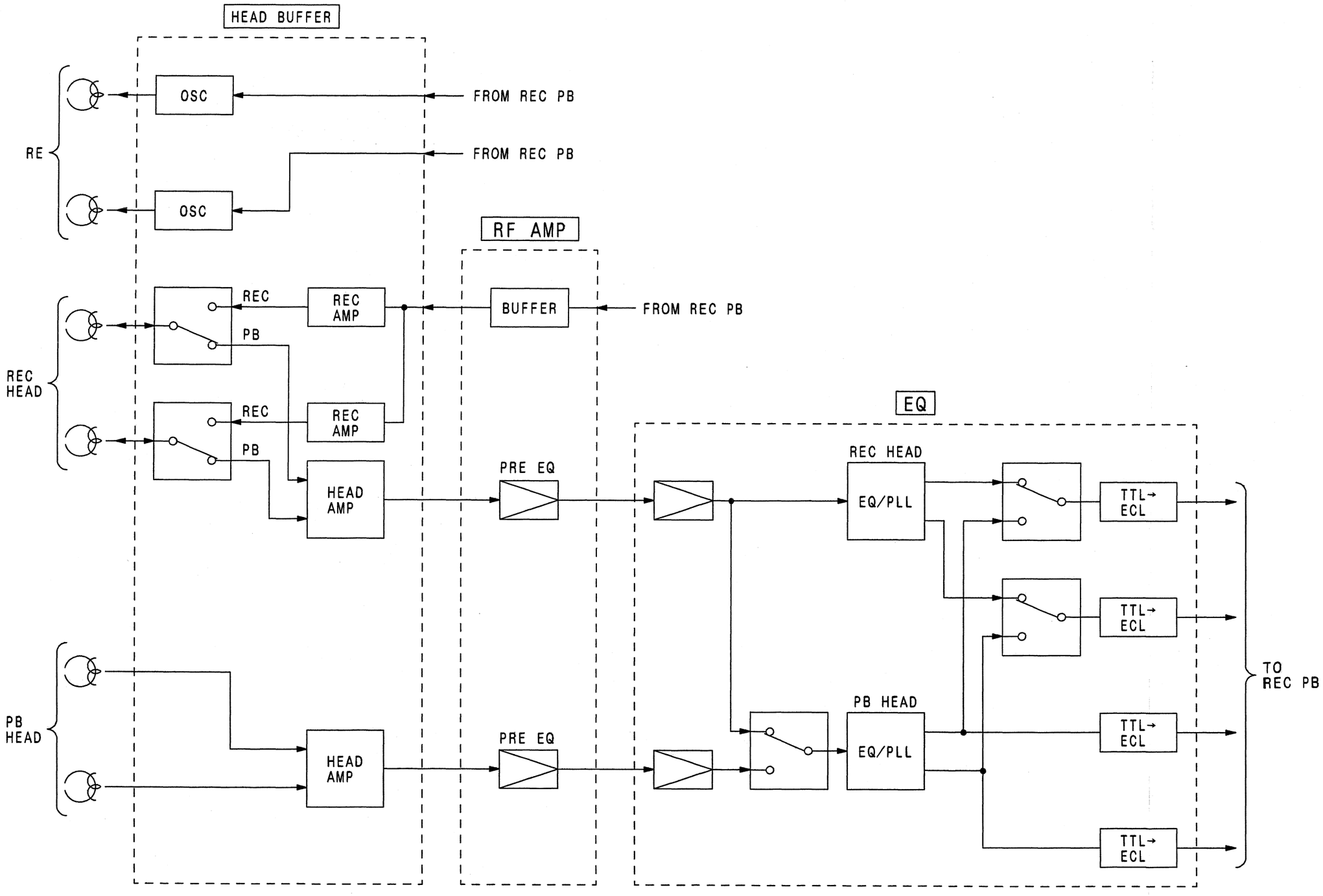
1—1

AUDIO OVERALL BLOCK DIAGRAM



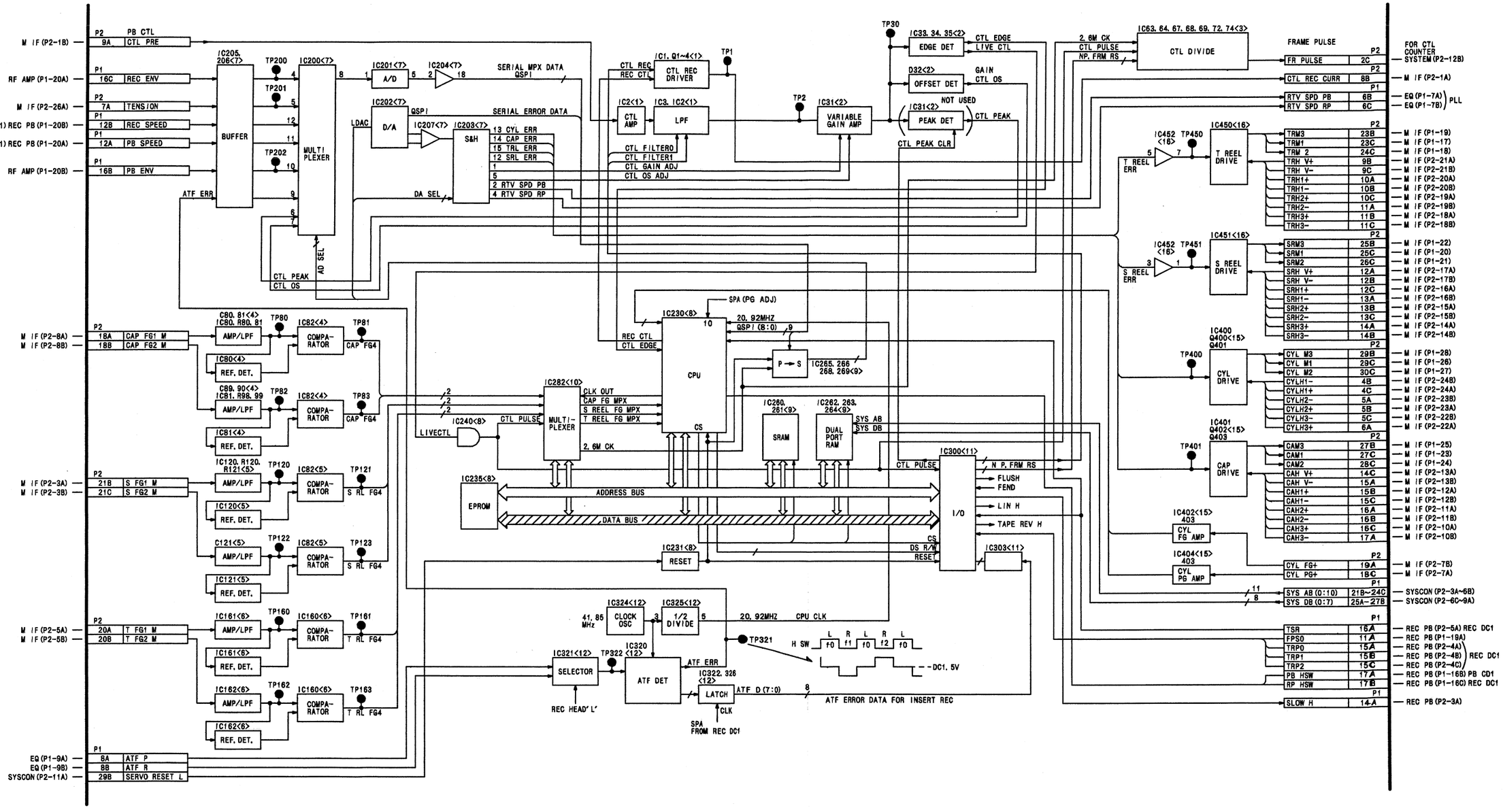
1—2

RF OVERALL BLOCK DIAGRAM



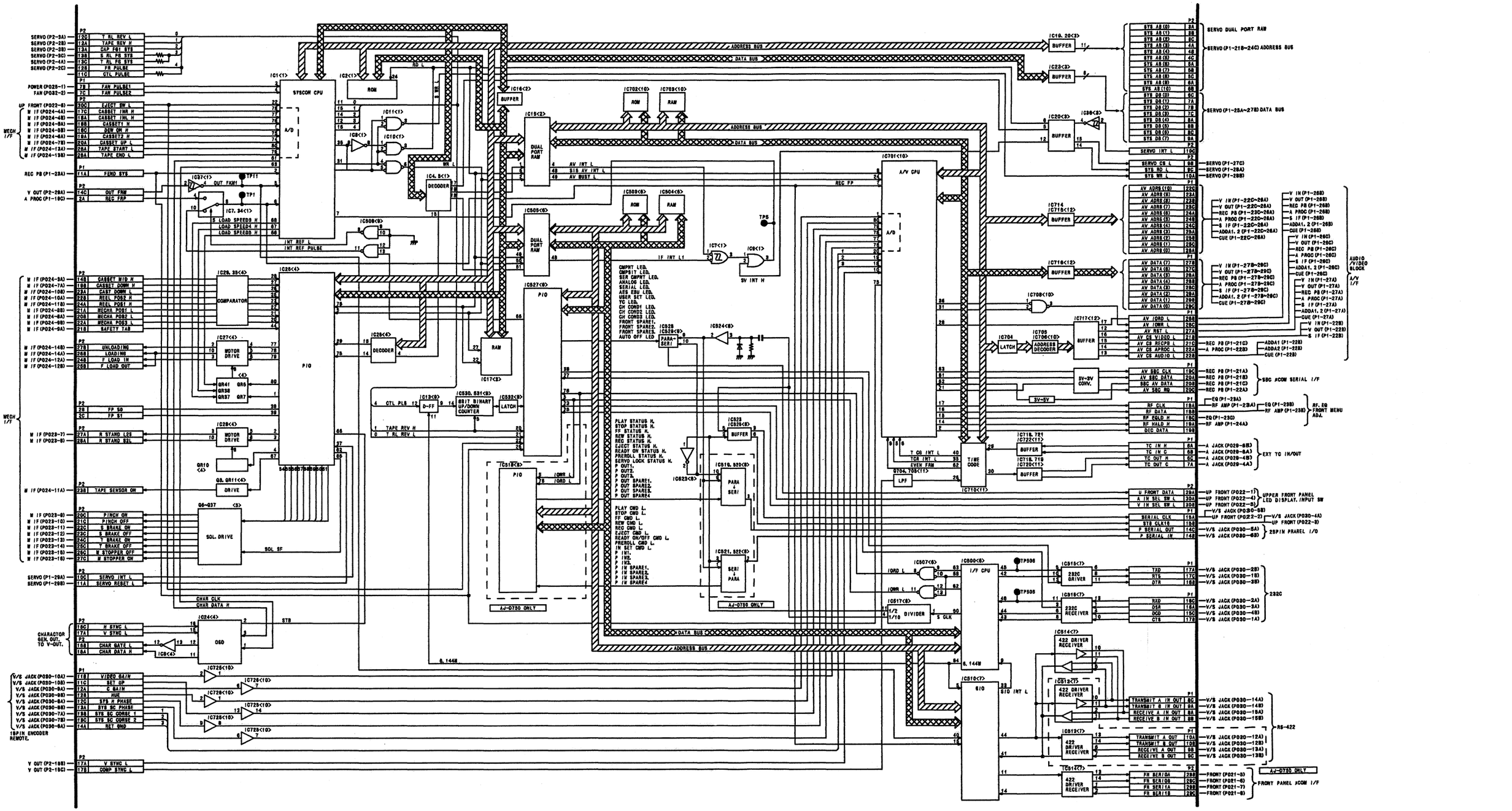
1—3

F1 SERVO BLOCK DIAGRAM



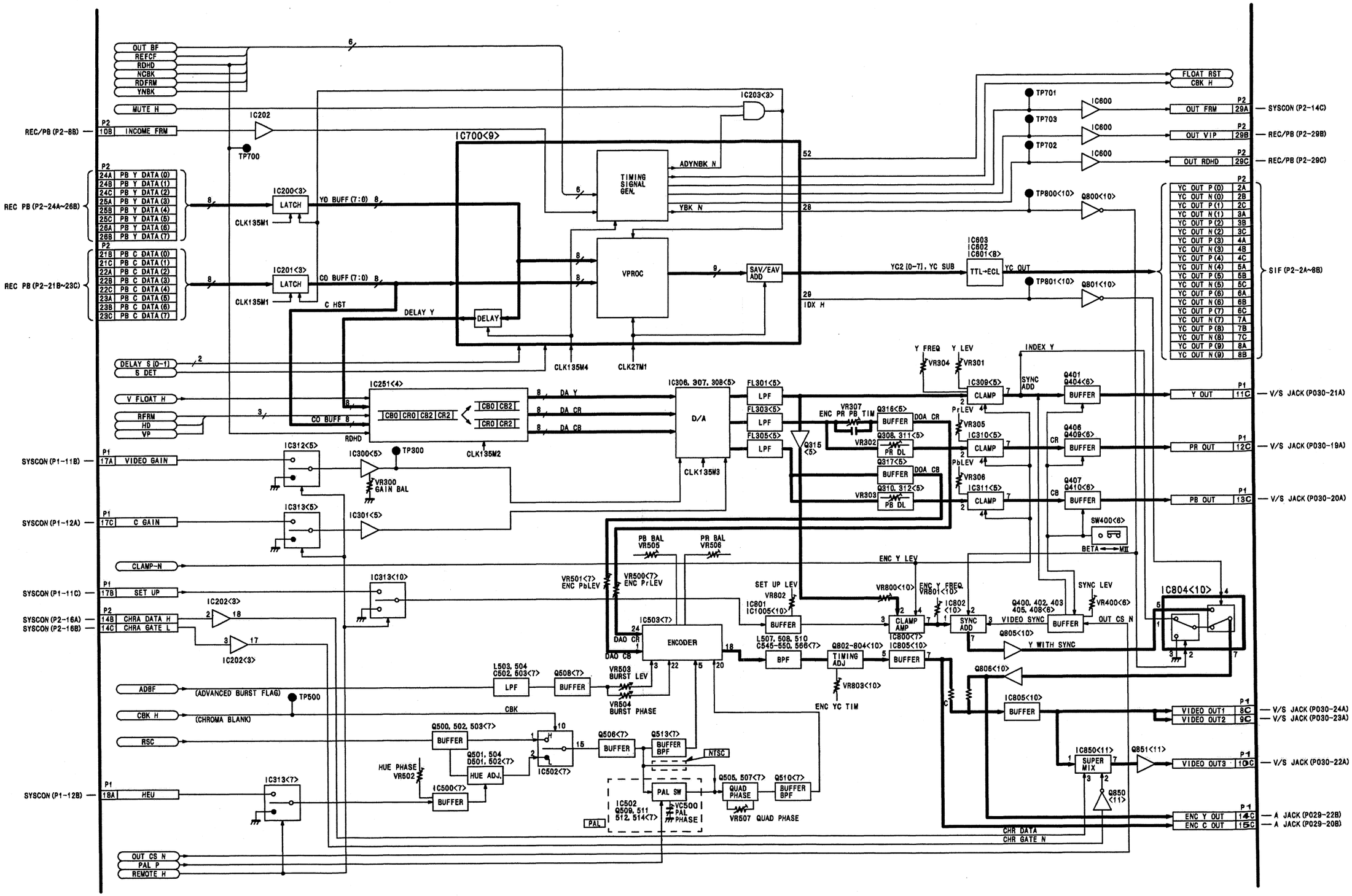
1—4

F2 SYSCON BLOCK DIAGRAM



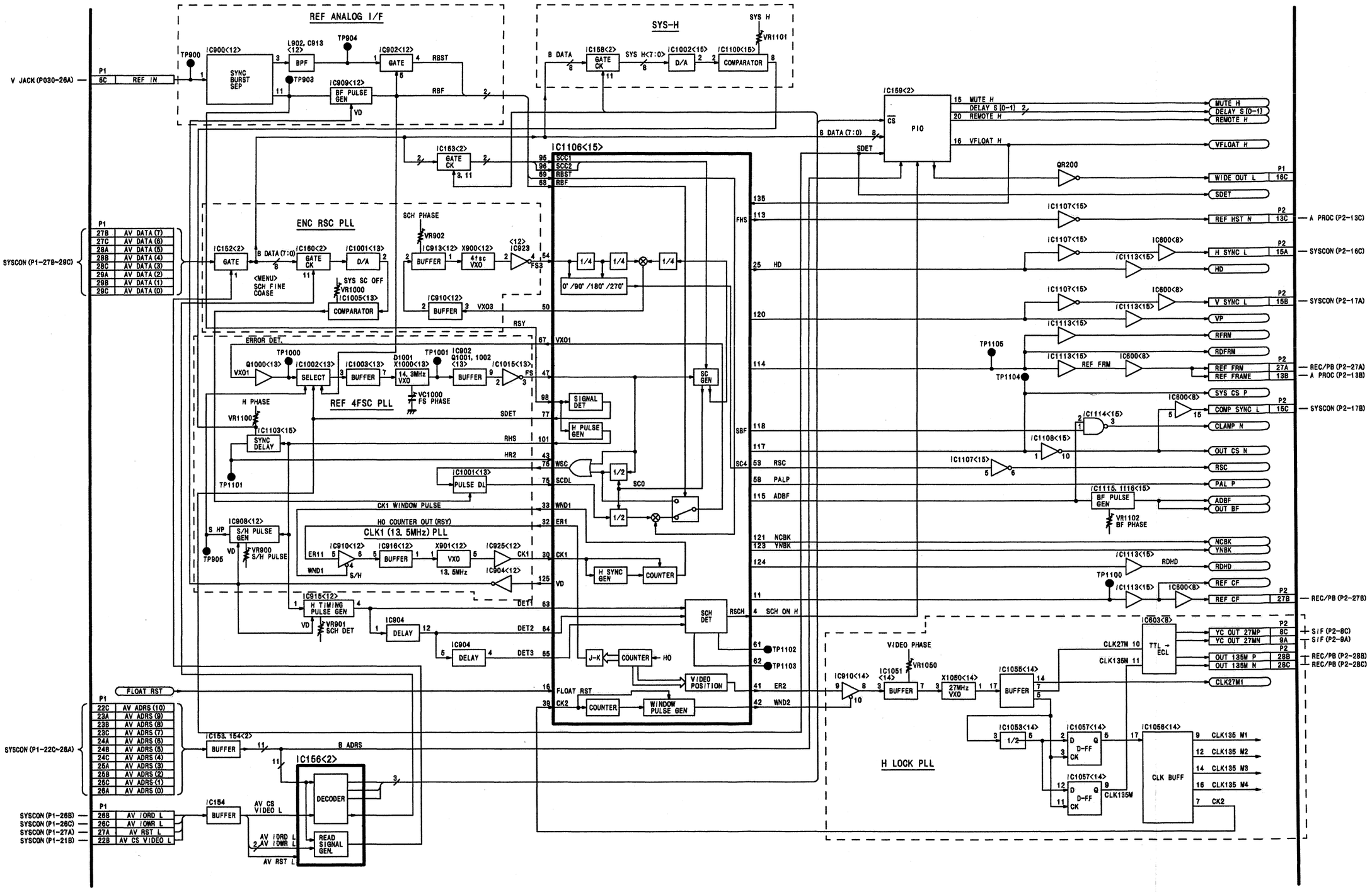
1—5

F4 V OUT (1/2) BLOCK DIAGRAM



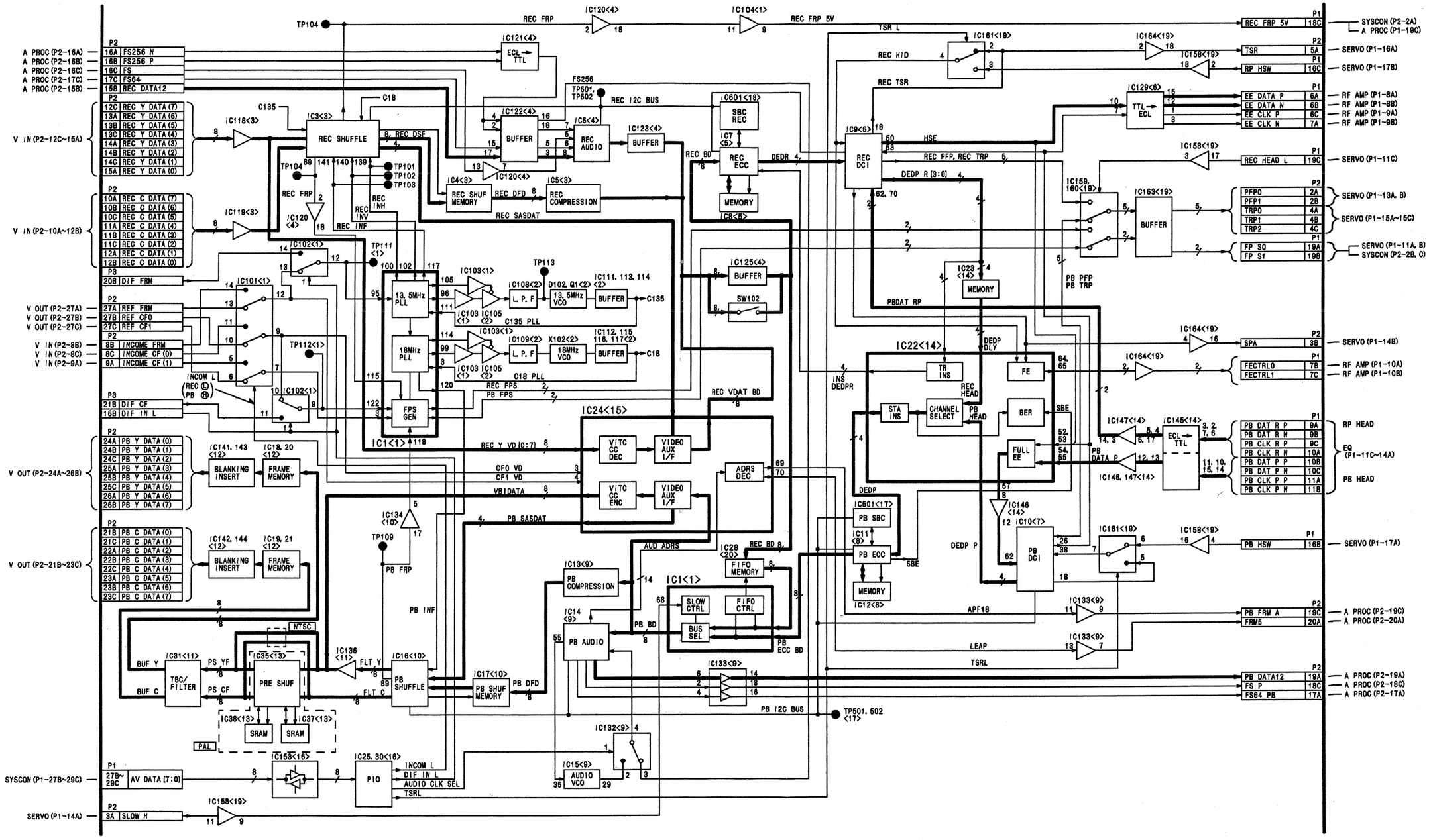
1—6

F4 V OUT (2/2) BLOCK DIAGRAM



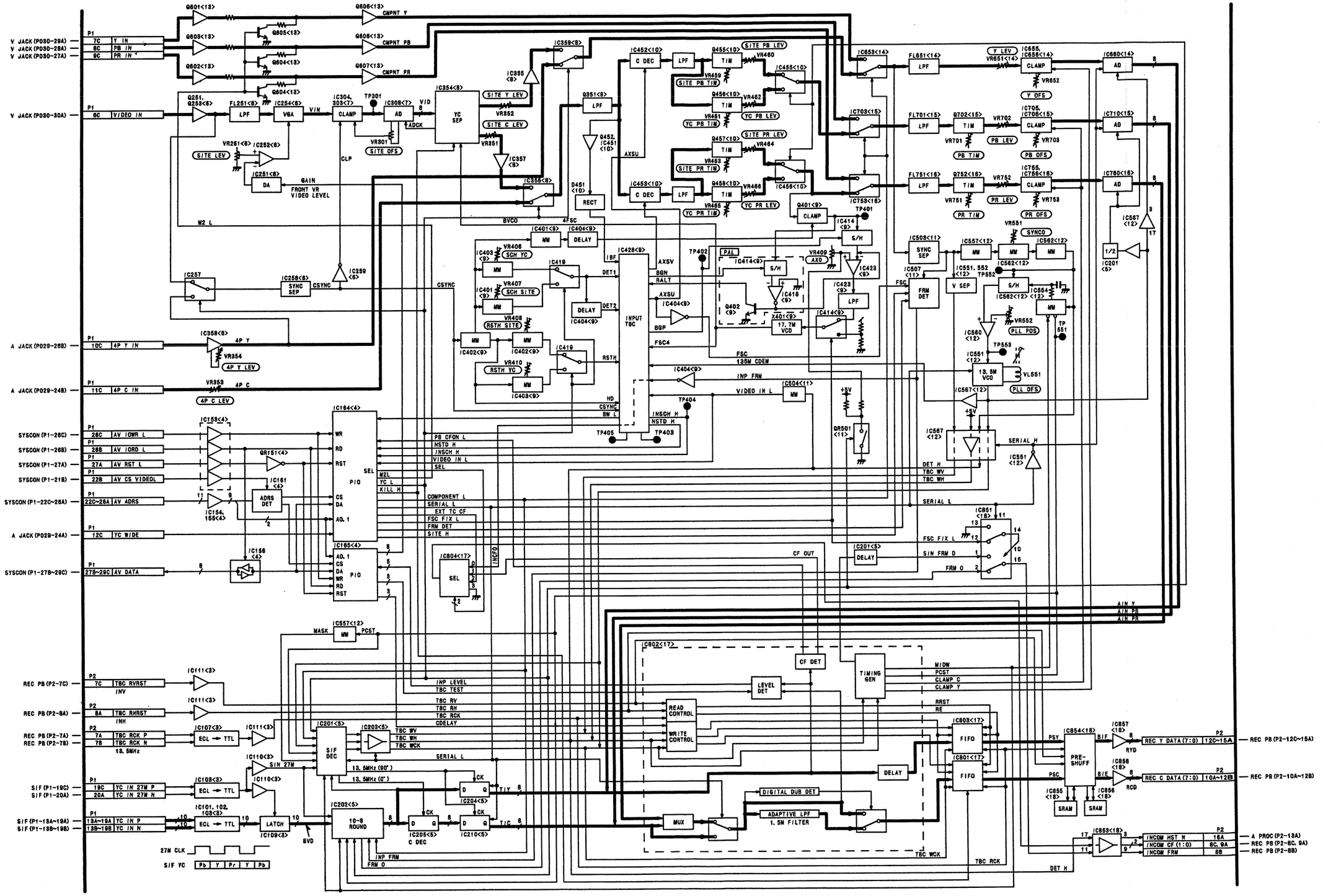
1—7

F5 REC PB BLOCK DIAGRAM



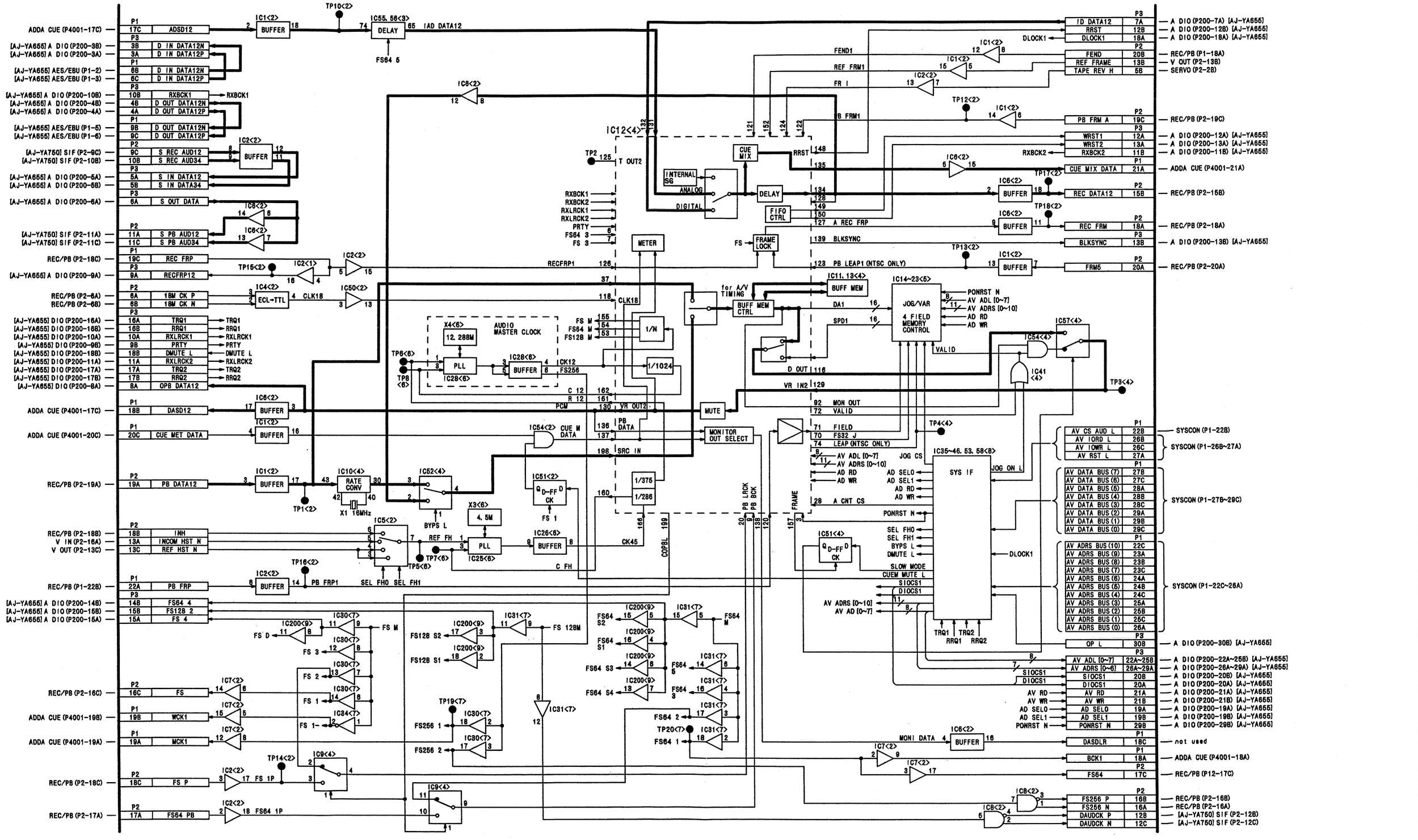
1—8

F6 V IN BLOCK DIAGRAM



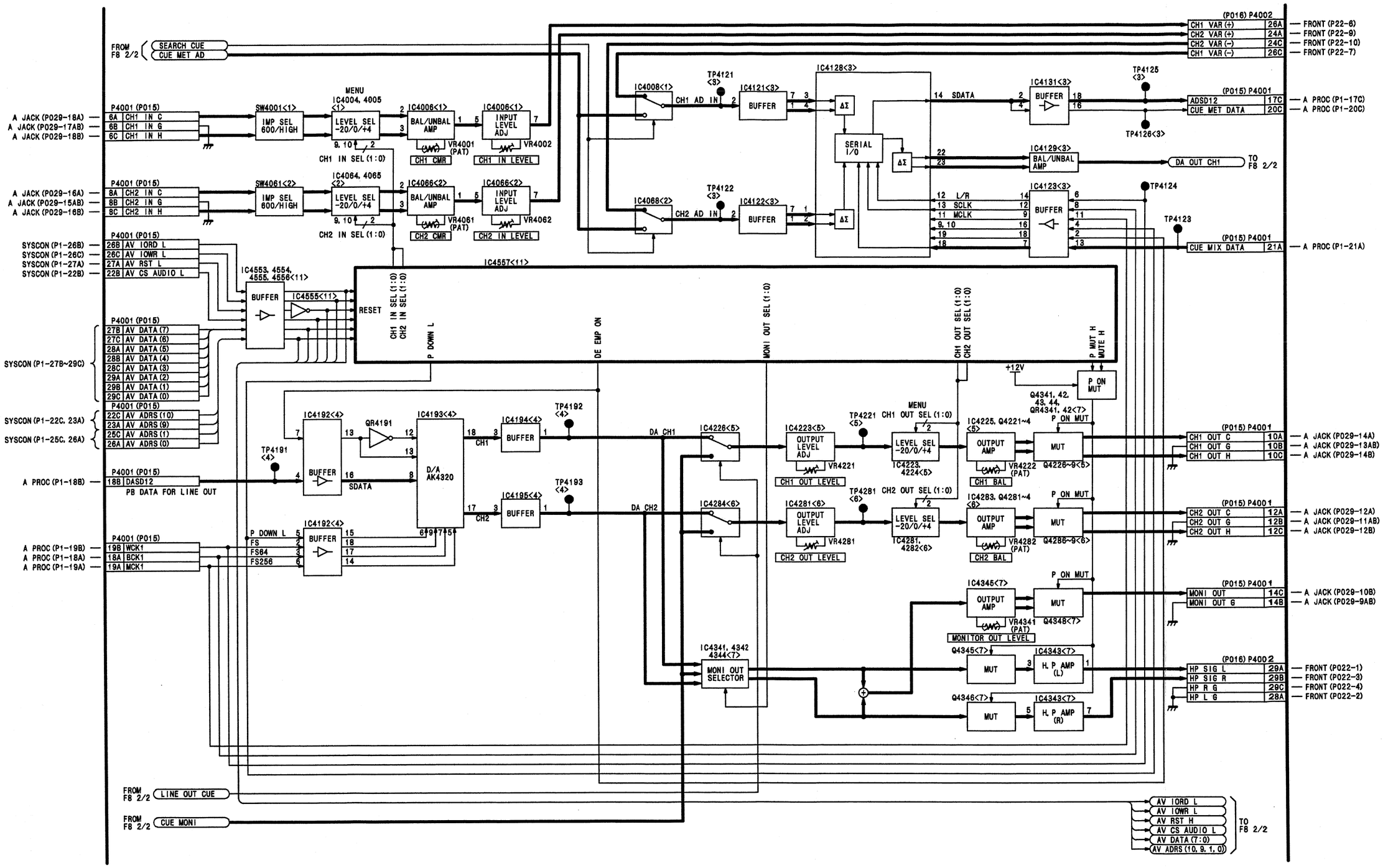
1—9

F7 A PROC BLOCK DIAGRAM



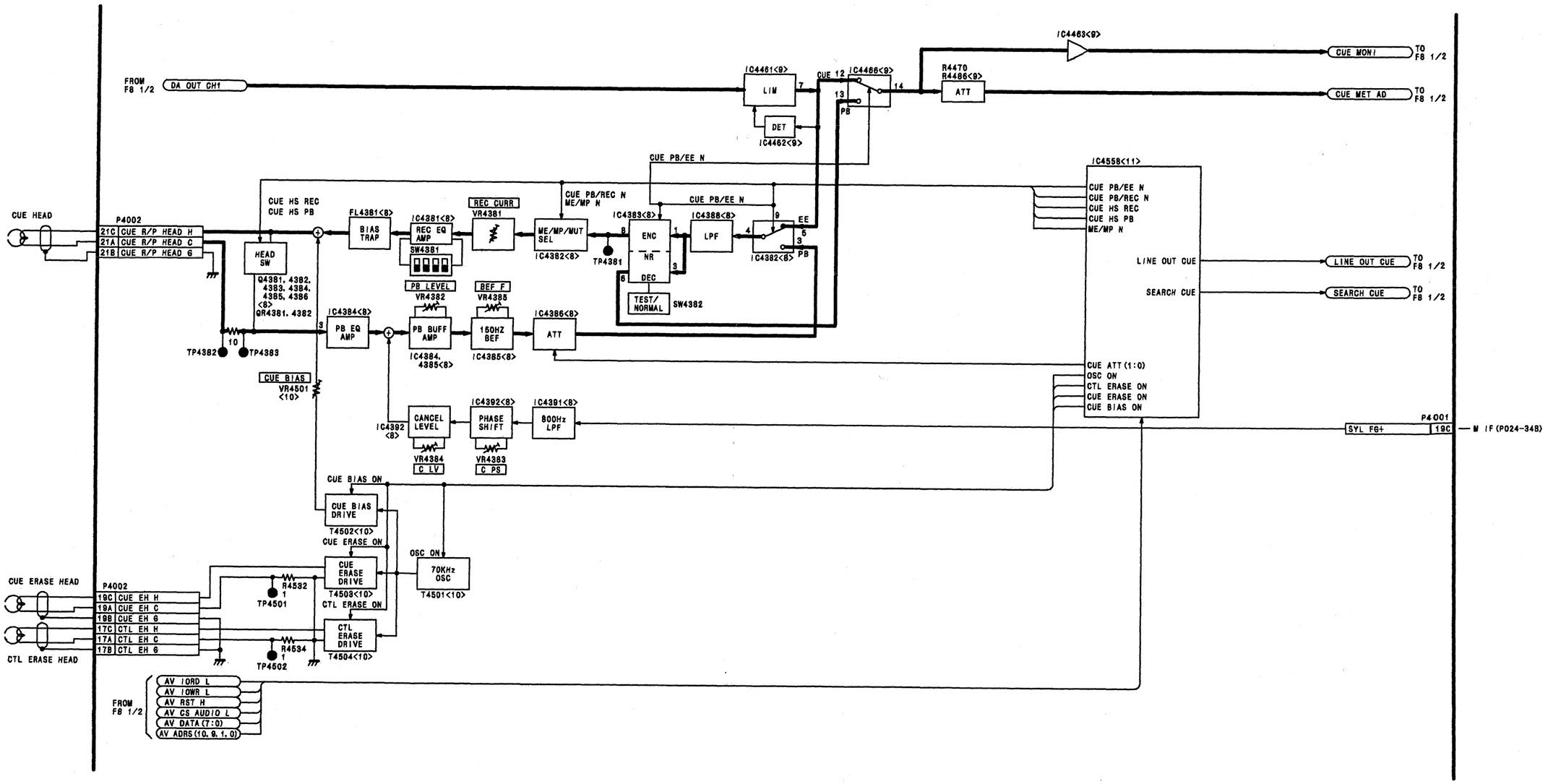
1—10

F8 ADDA CUE (1/2) BLOCK DIAGRAM



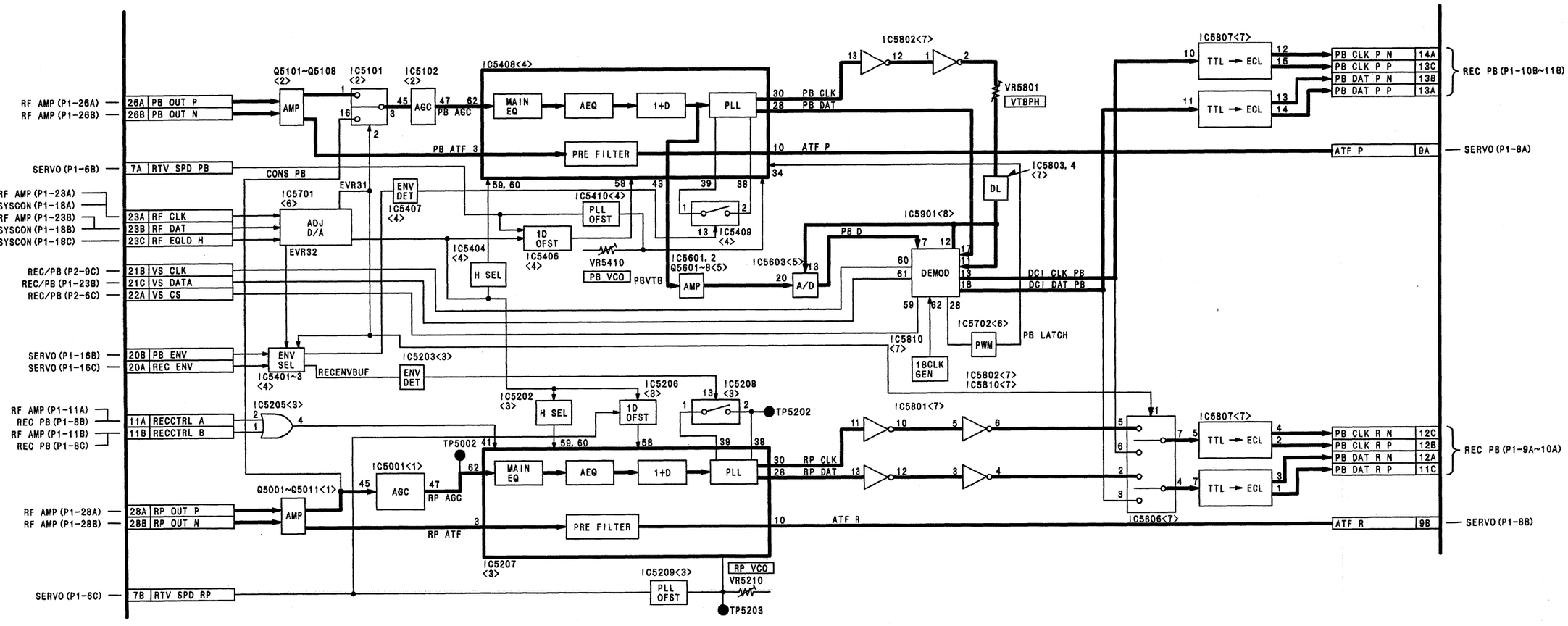
1—11

F8 ADDA CUE (2/2) BLOCK DIAGRAM



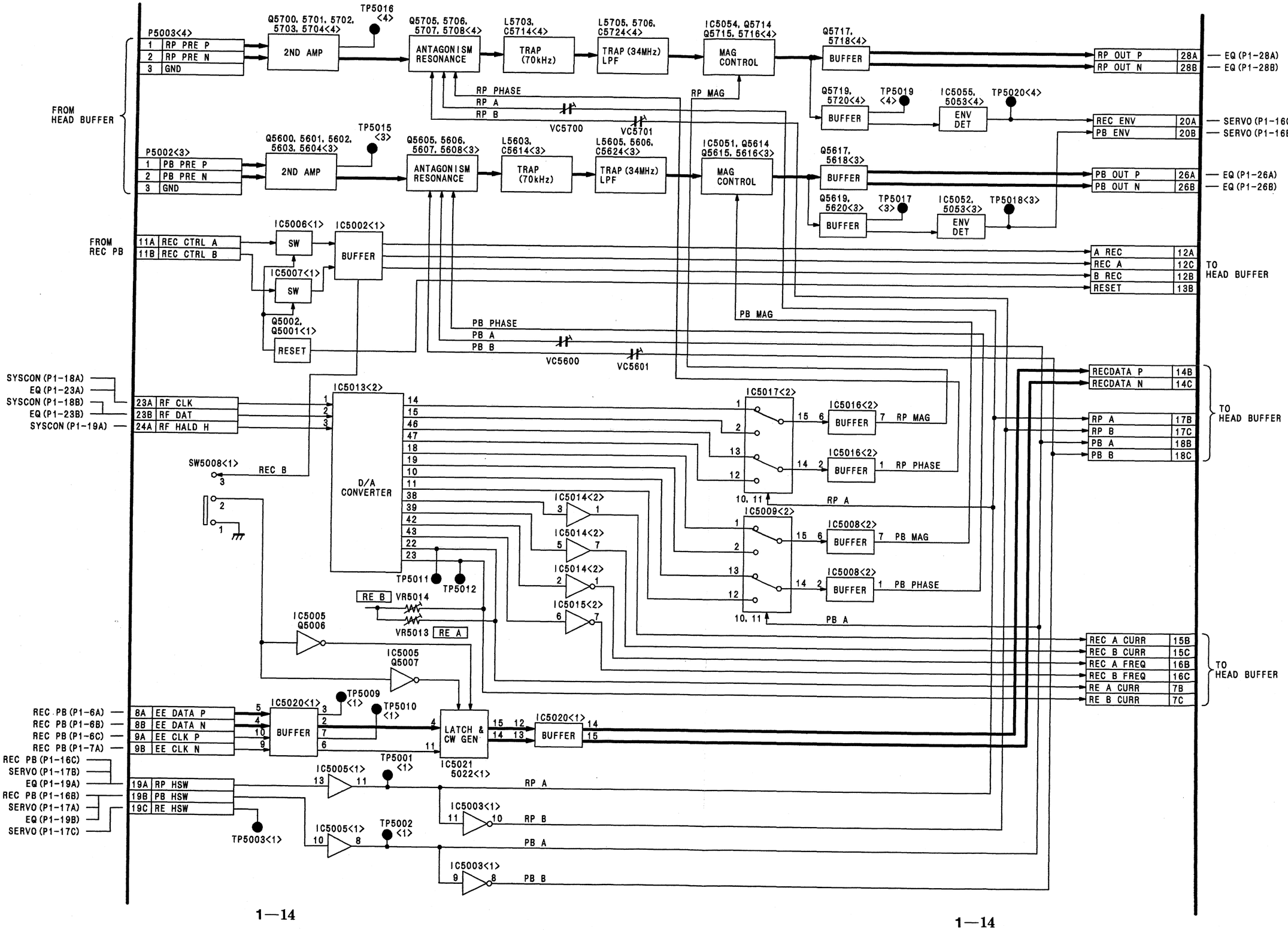
1—12

H3 EQ BLOCK DIAGRAM



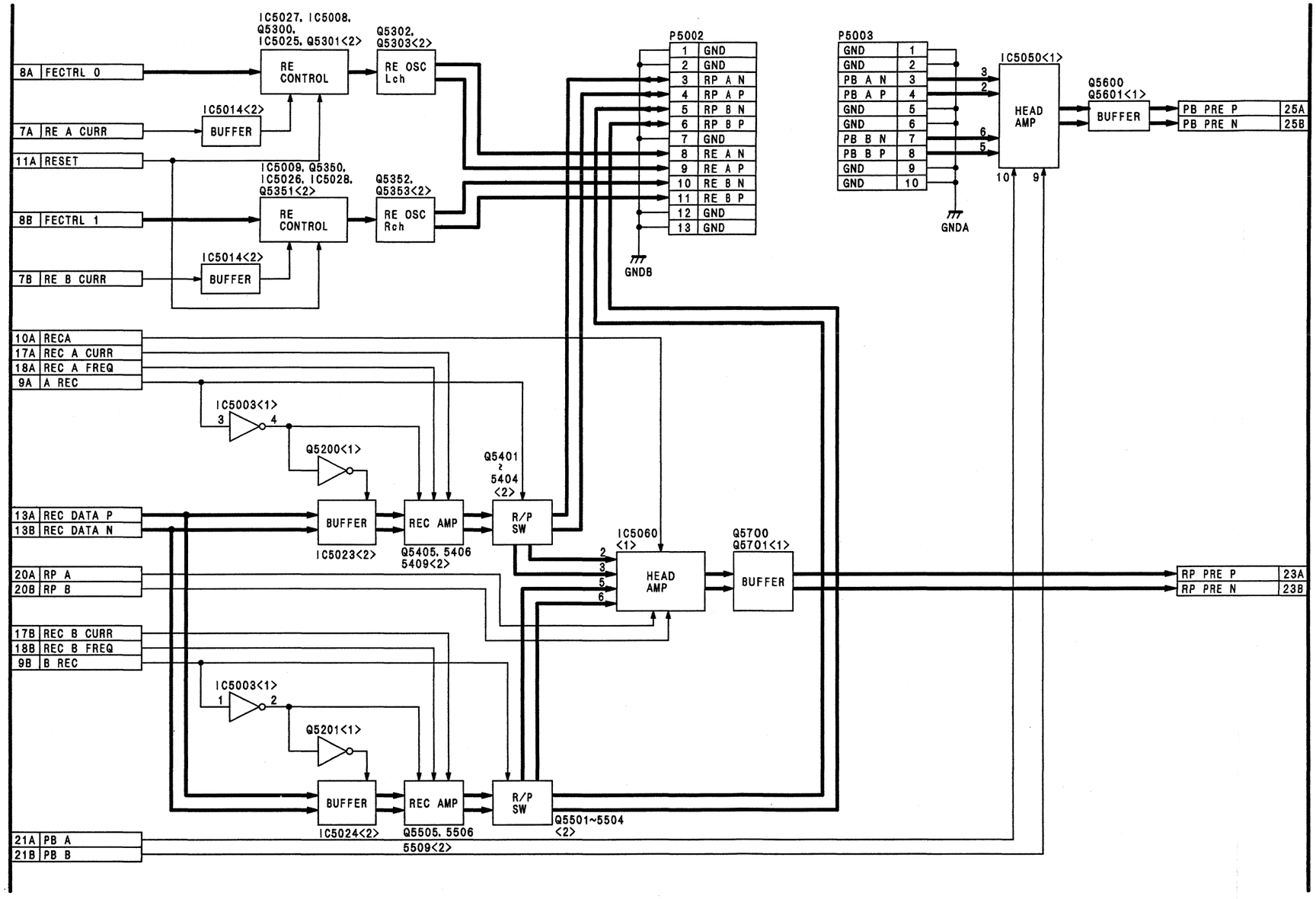
1—13

H4 RF AMP BLOCK DIAGRAM



1—14

HEAD BUFFER BLOCK DIAGRAM



1—15

SECTION 2

SCHEMATIC DIAGRAMS

CONTENTS

MOTHER 2-1
F1 SERVO 2-12
F2 SYSCON 2-31
F4 V OUT 2-45
F5 REC PB 2-61
F6 V IN 2-84
F7 A PROC 2-102
F8 ADDA CUE 2-115
H3 EQ 2-127
H4 RF AMP 2-136
HEAD BUFFER 2-141
V/S JACK 2-143
POWER 1 2-146
POWER 2 2-147
CARRIAGE 2-148
MECHA IF 2-149
A JACK 2-153
FRONT 2-154
HEADPHONE 2-157
SUB JACK 2-158
EJECT 2-158

IMPORTANT SAFETY NOTICE

COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

NOTE

DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING.
THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LISTS.
AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

MOTHER 1/11 SCHEMATIC DIAGRAM

SERVO (F1)

P001
VJS2899A096

	1A	GND	
	2A	+12V	
	3A	-12V	
	4A	+7.5V	
	5A	-7.5V	
	6A	GND	
	7A	GND	
P19_9A	8A	ATF_P	
P9_17A	9A	TAPE_CF0	
P9_18A, P14_20B	10A	FEND	
P9_19A, P4_2B	11A	FP_S0	
P9_20A	12A	PB_SPEED	
P9_2A	13A	PFP0	
P9_3A	14A	SLOW_H	
P9_4A	15A	TRP0	
P9_5A	16A	TSR	
P9_16B, P20_19B, P19_19B	17A	PB_HSW	
	18A	LOAD_FG	
P23_29	19A		
	20A		
	21A		
P4_3C	22A	SYS_AB2	
P4_4C	23A	SYS_AB5	
P4_5C	24A	SYS_AB8	
P4_6C	25A	SYS_DB0	
P4_7C	26A	SYS_DB3	
P4_8C	27A	SYS_DB6	
P4_9C	28A	SYS_RD_L	
P4_10C	29A	SERVO_INT_L	
	30A	+5V	
	31A	-5V	
	32A	GND	

P001
VJS2899A096

	1B	GND	
	2B	+12V	
	3B	-12V	
	4B	+7.5V	
	5B	-7.5V	
P19_7A	6B	RTV_SPD_PB	
P19_8A	7B	REF_CLK	
P19_9B	8B	ATF_R	
P9_17B	9B	TAPE_CF1	
P9_18B	10B	FLUSH	
P9_19B, P4_2C	11B	FP_S1	
P9_20B	12B	REC_SPEED	
P9_2B	13B	PFP1	
P9_3B	14B	SPA	
P9_4B	15B	TRP1	
P20_20B	16B	PB_ENV	
P20_19A, P9_16C, P19_19A	17B	RP_HSW	
	18B		
P13_14B	19B	AUDIO_JOG0	
	20B		
P4_3A	21B	SYS_AB0	
P4_4A	22B	SYS_AB3	
P4_5A	23B	SYS_AB6	
P4_6A	24B	SYS_AB9	
P4_7A	25B	SYS_DB1	
P4_8A	26B	SYS_DB4	
P4_9A	27B	SYS_DB7	
P4_10A	28B	SYS_WR_L	
P4_11A	29B	SERVO_RESET_L	
	30B	+5V	
	31B	-5V	
	32B	GND	

P001
VJS2899A096

	1C	GND	
	2C	+12V	
	3C	-12V	
	4C	+7.5V	
	5C	-7.5V	
P19_7B	6C	RTV_SPD_RP	
	7C	GND	
	8C	GND	
P9_17C	9C	TAPE_CFEN	
	10C		
P9_19C	11C	REC_HEAD_L	
	12C		
P9_2C	13C	LIN_H	
P9_3C	14C	STILL_H	
P9_4C	15C	TRP2	
P20_20A	16C	REC_ENV	
P20_19C	17C	RE_HSW	
	18C		
P13_14C	19C	AUDIO_JOG1	
	20C		
P4_3B	21C	SYS_AB1	
P4_4B	22C	SYS_AB4	
P4_5B	23C	SYS_AB7	
P4_6B	24C	SYS_AB10	
P4_7B	25C	SYS_DB2	
P4_8B	26C	SYS_DB5	
P4_9B	27C	SERVO_CS_L	
P4_10B	28C	SYS_BUSY_L	
P4_11B	29C	SYS_SERVO_INT_L	
	30C	+5V	
	31C	-5V	
	32C	GND	

P002
VJS2899A096

P4_11C, P10_5C	1A	GND	
P4_12C	2A	CTL_PULSE	
P4_13C	3A	T_RL_REV_L	
P24_B18	4A	T_RL_FG_SYS	
P24_A19	5A	CYLH2-	
P24_A15	6A	CYLH3+	
P24_B16	7A	TENSION	
P24_B40	8A	CYLH_V-	
P24_A21	9A	CTL_PRE	
P24_B22	1 A	TRH1+	
P24_A24	11A	TRH2-	
P24_B25	12A	SRH_V+	
P24_A27	13A	SRH1-	
P24_B28	14A	SRH3+	
P24_A30	15A	CAH_V-	
P24_B31	16A	CAH2+	
P24_A33	17A	CAH3-	
P24_B34	18A	CAP_FG1_M	
P24_A36	19A	CYL_FG+	
P24_B37	20A	T_FG1_M	
P4_A14	21A	S_FG_GND	
	22A	LOAD_ERR_SYS	
	23A		
	24A		
	25A		
	26A		
	27A		
	28A		
	29A		
	30A		
J1 LAND	31A	+16V	
	32A	GND_M	

P002
VJS2899A096

	1B	GND	
P4_12A, P10_5B	2B	TAPE_REV_H	
P4_13A	3B	CAP_FG1_SYS	
P4_14A, P24_B17	4B	CYLH1-	
P24_A18	5B	CYLH2+	
P23_30	6B	CLE_ON_H	
P24_B15	7B	TENS_GND	
P24_A40	8B	CTL_REC_CURR	
P24_A20	9B	TRH_V+	
P24_B21	10B	TRH1-	
P24_A23	11B	TRH3+	
P24_B24	12B	SRH_V-	
P24_A26	13B	SRH2+	
P24_B27	14B	SRH3-	
P24_A29	15B	CAH1+	
P24_B30	16B	CAH2-	
P24_A32	17B	CAP_FG_VCC	
P24_B33	18B	CAP_FG2_M	
P24_A35	19B	T_FG_V	
P24_B36	20B	T_FG2_M	
P24_A38	21B	S_FG1_M	
P24_A39	22B	CYL_PF_GND	
P23_19	23B	TRM3	
	24B		
P23_22	25B	SRM3	
	26B		
P23_25	27B	CAM3	
	28B		
P23_28	29B	CYL_M3	
	30B		
	31B	+16V	
	32B	GND_M	

P002
VJS2899A096

	1C	GND	
P4_12B	2C	FR_PULSE	
P4_13B	3C	S_RL_FG_SYS	
P24_A17	4C	CYLH1+	
P24_B19	5C	CYLH3-	
P24_A1	6C	CHECK_LINE_2	
P24_A16	7C	CYLH_V+	
P24_B39	8C	CTL_GND	
P24_B20	9C	TRH_V-	
P24_A22	10C	TRH2+	
P24_B23	11C	TRH3-	
P24_A25	12C	SRH1+	
P24_B26	13C	SRH2-	
P24_A28	14C	CAH_V+	
P24_B29	15C	CAH1-	
P24_A31	16C	CAH3+	
P24_B32	17C	CAP_FG_GND	
P24_A34	18C	CYL_PG+	
P24_B35	19C	T_FG_GND	
P24_A37	20C	S_FG_V	
P24_B38	21C	S_FG2_M	
	22C		
P23_17	23C	TRM1	
P23_18	24C	TRM2	
P23_20	25C	SRM1	
P23_21	26C	SRM2	
P23_23	27C	CAM1	
P23_24	28C	CAM2	
P23_26	29C	CYL_M1	
P23_27	30C	CYL_M2	
	31C	+16V	
	32C	GND_M	

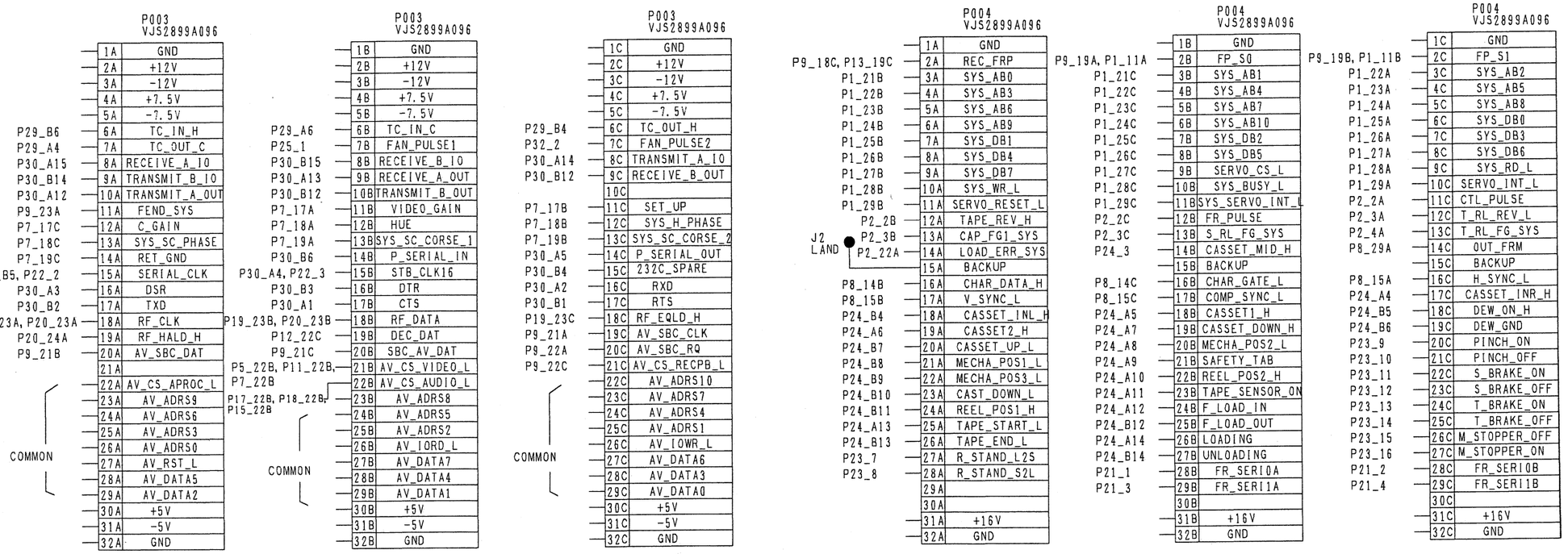
F E D C B A

1 2 3 4 5 6 7 8 9 10

2—1

MOTHER 2/11 SCHEMATIC DIAGRAM

SYSCON (F2)



MOTHER 3/11 SCHEMATIC DIAGRAM

SIF (F3)

P005
VJS2899A096

	1A	GND	
	2A	+12V	
	3A	-12V	
	4A	+7.5V	
	5A	-7.5V	
	6A		
	7A		
	8A		
	9A		
	10A		
	11A		
	12A		
P11_13A	13A	YC_IN_P0	
P11_14A	14A	YC_IN_N1	
P11_15A	15A	YC_IN_P3	
P11_16A	16A	YC_IN_N4	
P11_17A	17A	YC_IN_P6	
P11_18A	18A	YC_IN_N7	
P11_19A	19A	YC_IN_P9	
P11_20A	20A	YC_IN_27M_N	
	21A		
	22A	SIF_FRM	
P3_23A	23A	AV_ADRS9	
P3_24A	24A	AV_ADRS6	
P3_25A	25A	AV_ADRS3	
P3_26A	26A	AV_ADRS0	
P3_27A	27A	AV_RST_L	
P3_28A	28A	AV_DATA5	
P3_29A	29A	AV_DATA2	
	30A	+5V	
	31A	-5V	
	32A	GND	

P005
VJS2899A096

	1B	GND	
	2B	+12V	
	3B	-12V	
	4B	+7.5V	
	5B	-7.5V	
	6B		
	7B		
	8B		
	9B		
	10B		
	11B		
	12B		
P11_13B	13B	YC_IN_N0	
P11_14B	14B	YC_IN_P2	
P11_15B	15B	YC_IN_N3	
P11_16B	16B	YC_IN_P5	
P11_17B	17B	YC_IN_N6	
P11_18B	18B	YC_IN_P8	
P11_19B	19B	YC_IN_N9	
P11_20B	20B	SIF_CSYNC	
	21B		
P3_21B	22B	AV_CS_VIDEO_L	
P3_23B	23B	AV_ADRS8	
P3_24B	24B	AV_ADRS5	
P3_25B	25B	AV_ADRS2	
P3_26B	26B	AV_IORD_L	
P3_27B	27B	AV_DATA7	
P3_28B	28B	AV_DATA4	
P3_29B	29B	AV_DATA1	
	30B	+5V	
	31B	-5V	
	32B	GND	

P005
VJS2899A096

	1C	GND	
	2C	+12V	
	3C	-12V	
	4C	+7.5V	
	5C	-7.5V	
	6C		
	7C		
	8C		
	9C		
	10C		
	11C		
	12C		
P11_13C	13C	YC_IN_P1	
P11_14C	14C	YC_IN_N2	
P11_15C	15C	YC_IN_P4	
P11_16C	16C	YC_IN_N5	
P11_17C	17C	YC_IN_P7	
P11_18C	18C	YC_IN_N8	
P11_19C	19C	YC_IN_27M_P	
	20C		
	21C	EAVSAV	
P3_22C	22C	AV_ADRS10	
P3_23C	23C	AV_ADRS7	
P3_24C	24C	AV_ADRS4	
P3_25C	25C	AV_ADRS1	
P3_26C	26C	AV_IOWR_L	
P3_27C	27C	AV_DATA6	
P3_28C	28C	AV_DATA3	
P3_29C	29C	AV_DATA0	
	30C	+5V	
	31C	-5V	
	32C	GND	

P006
VJS2899A096

	1A	GND	
P8_2A	2A	YC_OUT_P0	
P8_3A	3A	YC_OUT_N1	
P8_4A	4A	YC_OUT_P3	
P8_5A	5A	YC_OUT_N4	
P8_6A	6A	YC_OUT_P6	
P8_7A	7A	YC_OUT_N7	
P8_8A	8A	YC_OUT_P9	
P8_9A	9A	YC_OUT_27M_N	
P14_10A	10A	S_REC_AUD12G	
P14_11A	11A	S_PB_AUD12	
P14_12A	12A	S_PB_AUD34G	
	13A		
	14A		
	15A		
	16A		
	17A		
	18A		
	19A		
	20A		
	21A		
	22A		
	23A		
	24A		
	25A		
	26A		
	27A		
	28A		
	29A		
	30A		
	31A	+16V	
	32A	GND	

P006
VJS2899A096

	1B	GND	
P8_2B	2B	YC_OUT_N0	
P8_3B	3B	YC_OUT_P2	
P8_4B	4B	YC_OUT_N3	
P8_5B	5B	YC_OUT_P5	
P8_6B	6B	YC_OUT_N6	
P8_7B	7B	YC_OUT_P8	
P8_8B	8B	YC_OUT_N9	
	9B		
P14_10B	10B	S_REC_AUD34	
P14_11B	11B	S_PB_AUD12G	
P14_12B	12B	DAUDCK_P	
	13B		
	14B		
	15B		
	16B		
	17B		
	18B		
	19B		
	20B		
	21B		
	22B		
	23B		
	24B		
	25B		
	26B		
	27B		
	28B		
	29B		
	30B		
	31B	+16V	
	32B	GND	

P006
VJS2899A096

	1C	GND	
P8_2C	2C	YC_OUT_P1	
P8_3C	3C	YC_OUT_N2	
P8_4C	4C	YC_OUT_P4	
P8_5C	5C	YC_OUT_N5	
P8_6C	6C	YC_OUT_P7	
P8_7C	7C	YC_OUT_N8	
P8_8C	8C	YC_OUT_27M_P	
P14_9C	9C	S_REC_AUD12	
P14_10C	10C	S_REC_AUD34G	
P14_11C	11C	S_PB_AUD34	
P14_12C	12C	DAUDCK_N	
	13C		
	14C		
	15C		
	16C		
	17C		
	18C		
	19C		
	20C		
	21C		
	22C		
	23C		
	24C		
	25C		
	26C		
	27C		
	28C		
	29C		
	30C		
	31C	+16V	
	32C	GND	

F E D C B A

1 2 3 4 5 6 7 8 9 10

V_OUT (F4)

P007 VJS2899A096

	1A	GND	
	2A	+12V	
	3A	-12V	
	4A	+7.5V	
	5A	-7.5V	
P30_B26	6A	REF_IN_G	
	7A		
P30_B24	8A	VIDEO_OUT1_G	
P30_B23	9A	VIDEO_OUT2_G	
P30_B22	10A	VIDEO_OUT3_G	
P30_B21	11A	Y_OUT_G	
P30_B19	12A	PR_OUT_G	
P30_B20	13A	PB_OUT_G	
P29_A/B21	14A	4P_Y_OUT_G	
P29_A/B19	15A	4P_C_OUT_G	
	16A		
P3_11B	17A	VIDEO_GAIN	
P3_12B	18A	HUE	
P3_13B	19A	SYS_SC_CORSE_1	
	20A		
	21A		
	22A		
P3_23A	23A	AV_ADRS9	
P3_24A	24A	AV_ADRS6	
P3_25A	25A	AV_ADRS3	
P3_26A	26A	AV_ADRS0	
P3_27A	27A	AV_RST_L	
P3_28A	28A	AV_DATA5	
P3_29A	29A	AV_DATA2	
	30A	+5V	
	31A	-5V	
	32A	GND	

P007 VJS2899A096

	1B	GND	
	2B	+12V	
	3B	-12V	
	4B	+7.5V	
	5B	-7.5V	
	6B		
	7B		
	8B		
	9B		
	10B		
	11B		
P13_12B	12B	YOBI_1	
P13_13B	13B	YOBI_2	
	14B		
	15B		
	16B		
P3_11C	17B	SET_UP	
P3_12C	18B	SYS_H_PHASE	
P3_13C	19B	SYS_SC_CORSE_2	
	20B		
	21B		
P3_21B	22B	AV_CS_VIDEO_L	
P3_23B	23B	AV_ADRS8	
P3_24B	24B	AV_ADRS5	
P3_25B	25B	AV_ADRS2	
P3_26B	26B	AV_IORD_L	
P3_27B	27B	AV_DATA7	
P3_28B	28B	AV_DATA4	
P3_29B	29B	AV_DATA1	
	30B	+5V	
	31B	-5V	
	32B	GND	

P007 VJS2899A096

	1C	GND	
	2C	+12V	
	3C	-12V	
	4C	+7.5V	
	5C	-7.5V	
P30_A26	6C	REF_IN	
	7C		
P30_A24	8C	VIDEO_OUT1	
P30_A23	9C	VIDEO_OUT2	
P30_A22	10C	VIDEO_OUT3	
P30_A21	11C	Y_OUT	
P30_A19	12C	PR_OUT	
P30_A20	13C	PB_OUT	
P29_B22	14C	4P_Y_OUT	
P29_B20	15C	4P_C_OUT	
	16C		
P3_12A	17C	C_GAIN	
P3_13A	18C	SYS_SC_PHASE	
P3_14A	19C	RET_GND	
	20C		
	21C		
P3_22C	22C	AV_ADRS10	
P3_23C	23C	AV_ADRS7	
P3_24C	24C	AV_ADRS4	
P3_25C	25C	AV_ADRS1	
P3_26C	26C	AV_IOWR_L	
P3_27C	27C	AV_DATA6	
P3_28C	28C	AV_DATA3	
P3_29C	29C	AV_DATA0	
	30C	+5V	
	31C	-5V	
	32C	GND	

P008 VJS2899A096

	1A	GND	
P6_2A	2A	YC_OUT_P0	
P6_3A	3A	YC_OUT_N1	
P6_4A	4A	YC_OUT_P3	
P6_5A	5A	YC_OUT_N4	
P6_6A	6A	YC_OUT_P6	
P6_7A	7A	YC_OUT_N7	
P6_8A	8A	YC_OUT_P9	
P6_9A	9A	YC_OUT_27M_N	
	10A		
	11A		
	12A		
	13A		
	14A		
P4_16C	15A	H_SYNC_L	
	16A		
	17A		
	18A		
P10_21A, P12_21A, P14_21A	19A	I2C_DAT	
	20A		
	21A		
P10_22A	22A	PB_C_DATA2	
P10_23A	23A	PB_C_DATA5	
P10_24A	24A	PB_Y_DATA0	
P10_25A	25A	PB_Y_DATA3	
P10_26A	26A	PB_Y_DATA6	
P10_27A	27A	REF_FRM	
	28A		
P4_14C	29A	OUT_FRM	
	30A		
	31A	+16V	
	32A	GND	

P008 VJS2899A096

	1B	GND	
P6_2B	2B	YC_OUT_N0	
P6_3B	3B	YC_OUT_P2	
P6_4B	4B	YC_OUT_N3	
P6_5B	5B	YC_OUT_P5	
P6_6B	6B	YC_OUT_N6	
P6_7B	7B	YC_OUT_P8	
P6_8B	8B	YC_OUT_N9	
	9B		
	10B	INCOME_FRM	
	11B		
	12B		
P14_13B	13B	REF_FRAME	
P4_16A	14B	CHAR_DATA_H	
P4_17A	15B	V_SYNC_L	
	16B		
	17B		
	18B		
	19B		
	20B		
P10_21B	21B	PB_C_DATA0	
P10_22B	22B	PB_C_DATA3	
P10_23B	23B	PB_C_DATA6	
P10_24B	24B	PB_Y_DATA1	
P10_25B	25B	PB_Y_DATA4	
P10_26B	26B	PB_Y_DATA7	
P10_27B	27B	REF_CF0	
P10_28B	28B	OUT_135M_P	
P10_29B	29B	OUT_VIP	
	30B		
	31B	+16V	
	32B	GND	

P008 VJS2899A096

	1C	GND	
P6_2C	2C	YC_OUT_P1	
P6_3C	3C	YC_OUT_N2	
P6_4C	4C	YC_OUT_P4	
P6_5C	5C	YC_OUT_N5	
P6_6C	6C	YC_OUT_P7	
P6_7C	7C	YC_OUT_N8	
P6_8C	8C	YC_OUT_27M_P	
	9C		
	10C		
	11C		
	12C		
P14_13C	13C	REF_HST_N	
P4_16B	14C	CHAR_GATE_L	
P4_17B	15C	COMP_SYNC_L	
	16C		
P10_20C, P12_20C, P14_20C	17C		
	18C	I2C_CLK	
	19C		
	20C		
P10_21C	21C	PB_C_DATA1	
P10_22C	22C	PB_C_DATA4	
P10_23C	23C	PB_C_DATA7	
P10_24C	24C	PB_Y_DATA2	
P10_25C	25C	PB_Y_DATA5	
P10_26C	26C	PB_FRM	
P10_27C	27C	REF_CF1	
P10_28C	28C	OUT_135M_N	
P10_29C	29C	OUT_RDHD	
	30C		
	31C	+16V	
	32C	GND	

MOTHER 5/11 SCHEMATIC DIAGRAM

REC/PB (F5)

P009
VJS2899A096

	1A	GND	
	2A	+12V	
	3A	-12V	
	4A	+7.5V	
	5A	-7.5V	
P20_8A	6A	EE_DATA_P	
P20_9B	7A	EE_CLK_N	
P20_10C	8A	RECI	P20_11A, P19_11A
P19_11C	9A	PB_DAT_R_P	
P19_12C	10A	PB_CLK_R_N	
P19_13C	11A	PB_CLK_P_P	
P19_14C	12A	VTB_CLK_N	
P19_15C	13A	VTB_D_P4	
P19_16C	14A	VTB_D_N3	
P19_17C	15A	VTB_D_P1	
P19_18C	16A	VTB_D_N0	
P1_9A	17A	TAPE_CF0	
P1_10A, P14_20B	18A	FEND	
P1_11A, P4_2B	19A	FP_S0	
P1_12A	20A	PB_SPEED	
P3_19C	21A	AV_SBC_CLK	
P3_20C	22A	AV_SBC_RQ	
P3_11A	23A	FEND_SYS	
P3_24A	24A	AV_ADRS6	
P3_25A	25A	AV_ADRS3	
P3_26A	26A	AV_ADRS0	
P3_27A	27A	AV_RST_L	
P3_28A	28A	AV_DATA5	
P3_29A	29A	AV_DATA2	
	30A	+5V	
	31A	-5V	
	32A	GND	

P009
VJS2899A096

	1B	GND	
	2B	+12V	
	3B	-12V	
	4B	+7.5V	
	5B	-7.5V	
P20_8B	6B	EE_DATA_N	
P20_10A	7B	FECTRL0	
P20_11A, P19_11A	8B	RECCTRL_A	
P19_12A	9B	PB_DAT_R_N	
P19_13A	10B	PB_DAT_P_P	
P19_14A	11B	PB_CLK_P_N	
P19_15A	12B	VTB_D_P5	
P19_16A	13B	VTB_D_N4	
P19_17A	14B	VTB_D_P2	
P19_18A	15B	VTB_D_N1	
P19_19A, P20_19A, P1_17A	16B	PB_HSW	
P1_9B	17B	TAPE_CF1	
P1_10B	18B	FLUSH	
P1_11B, P4_2C	19B	FP_S1	
P1_12B	20B	REC_SPEED	
P3_20A	21B	AV_SBC_DAT	
P19_19C	22B	PB_FRP	
P19_21C	23B	VS_DATA	
P3_24B	24B	AV_ADRS5	
P3_25B	25B	AV_ADRS2	
P3_26B	26B	AV_IORD_L	
P3_27B	27B	AV_DATA7	
P3_28B	28B	AV_DATA4	
P3_29B	29B	AV_DATA1	
	30B	+5V	
	31B	-5V	
	32B	GND	

P009
VJS2899A096

	1C	GND	
	2C	+12V	
	3C	-12V	
	4C	+7.5V	
	5C	-7.5V	
P20_9A	6C	EE_CLK_P	
P20_10B	7C	FECTRL1	
P20_11B, P19_11B	8C	RECCTRL_B	
P19_12B	9C	PB_CLK_R_P	
P19_13B	10C	PB_DAT_P_N	
P19_14B	11C	VTB_CLK_P	
P19_15B	12C	VTB_D_N5	
P19_16B	13C	VTB_D_P3	
P19_17B	14C	VTB_D_N2	
P19_18B	15C	VTB_D_P0	
P1_17B, P19_19B, P20_19B	16C	RP_HSW	
P1_9C	17C	TAPE_CFEN	
P4_2A	18C	REC_FRP	
P1_11C	19C	REC_HEAD_L	
P19_20C	20C	PBH	
P3_20B	21C	SBC_AV_DAT	
P3_21C	22C	AV_CS_RECPB_L	
P3_23C	23C	AV_ADRS7	
P3_24C	24C	AV_ADRS4	
P3_25C	25C	AV_ADRS1	
P3_26C	26C	AV_IOWR_L	
P3_27C	27C	AV_DATA6	
P3_28C	28C	AV_DATA3	
P3_29C	29C	AV_DATA0	
	30C	+5V	
	31C	-5V	
	32C	GND	

P010
VJS2899A096

	1A	GND	
P1_13A	2A	PFP0	
P1_14A	3A	SLOW_H	
P1_15A	4A	TRP0	
P1_16A	5A	TSR	
P14_6A	6A	18M_CK_P	
P12_7A	7A	TBC_RCK_P	
P12_8A	8A	TBC_RHRST	
P12_9A	9A	INCOME_CF1	
P12_10A	10A	REC_C_DATA7	
P12_11A	11A	REC_C_DATA4	
P12_12A	12A	REC_C_DATA1	
P12_13A	13A	REC_Y_DATA6	
P12_14A	14A	REC_Y_DATA3	
P12_15A	15A	REC_Y_DATA0	
P14_16A	16A	FS256_N	
P14_17A	17A	FS64_PB	
P14_18A	18A	REC_FRN	
P14_19A	19A	PB_DATA12	
P14_20A	20A	FRM5	
P8_19A, P14_21A, P12_21A	21A	I2C_DAT	
P8_22A	22A	PB_C_DATA2	
P8_23A	23A	PB_C_DATA5	
P8_24A	24A	PB_Y_DATA0	
P8_25A	25A	PB_Y_DATA3	
P8_26A	26A	PB_Y_DATA6	
P8_27A	27A	REF_FRM	
	28A		
P8_29A	29A	OUT_FRM	
P24_B1	30A	CASSET_POS_1	
	31A	+16V	
	32A	GND	

P010
VJS2899A096

	1B	GND	
P1_13B	2B	PFP1	
P1_14B	3B	SPA	
P1_15B	4B	TRP1	
P2_2B, P14_5B	5B	TAPE_REV_H	
P14_6B	6B	18M_CK_N	
P12_7B	7B	TBC_RCK_N	
P12_8B	8B	INCOME_FRM	
P19_21A	9B	V_AD	
P12_10B	10B	REC_C_DATA6	
P12_11B	11B	REC_C_DATA3	
P12_12B	12B	REC_C_DATA0	
P12_13B	13B	REC_Y_DATA5	
P12_14B	14B	REC_Y_DATA2	
P14_15B	15B	REC_DATA12	
P14_16B	16B	FS256_P	
P14_17B	17B	VCLK	
P14_18B	18B	INH	
P14_19B	19B	PB_DATA34	
	20B		
P8_21B	21B	PB_C_DATA0	
P8_22B	22B	PB_C_DATA3	
P8_23B	23B	PB_C_DATA6	
P8_24B	24B	PB_Y_DATA1	
P8_25B	25B	PB_Y_DATA4	
P8_26B	26B	PB_Y_DATA7	
P8_27B	27B	REF_CF0	
P8_28B	28B	OUT_135M_P	
P8_29B	29B	OUT_VIP	
P24_A2	30B	CASSET_POS_2	
	31B	+16V	
	32B	GND	

P010
VJS2899A096

	1C	GND	
P1_13C	2C	LIN_H	
P1_14C	3C	STILL_H	
P1_15C	4C	TRP2	
P2_2A	5C	CTL_PULSE	
P19_22A	6C	VS_CS	
P12_7C	7C	TBC_RVRST	
P12_8C	8C	INCOME_CF0	
P19_21B	9C	VS_CLK	
P12_10C	10C	REC_C_DATA5	
P12_11C	11C	REC_C_DATA2	
P12_12C	12C	REC_Y_DATA7	
P12_13C	13C	REC_Y_DATA4	
P12_14C	14C	REC_Y_DATA1	
P14_15C	15	REC_DATA34	
P14_16C	16C	FS	
P14_17C	17C	FS64	
P14_18C	18C	FS_P	
P14_19C	19C	PB_FRM_A	
P14_20C, P12_20C, P8_18C	20C	I2C_CLK	
P8_21C	21C	PB_C_DATA1	
P8_22C	22C	PB_C_DATA4	
P8_23C	23C	PB_C_DATA7	
P8_24C	24C	PB_Y_DATA2	
P8_25C	25C	PB_Y_DATA5	
P8_26C	26C	PB_FRM	
P8_27C	27C	REF_CF1	
P8_28C	28C	OUT_135M_N	
P8_29C	29C	OUT_RDHD	
P24_B2	30C	CASSET_POS_3	
	31C	+16V	
	32C	GND	

2—5

MOTHER 6/11 SCHEMATIC DIAGRAM

VIN (F6)

P011
VJS2899A096

	1A	GND	
	2A	+12V	
	3A	-12V	
	4A	+7.5V	
	5A	-7.5V	
P30_B30	6A	VIDEO_IN_G	
P30_B29	7A	Y_IN_G	
P30_B28	8A	PB_IN_G	
P30_B27	9A	PR_IN_G	
P29_A/B25	10A	4P_Y_IN_G	
P29_A/B23	11A	4P_C_IN_G	
	12A		
P5_13A	13A	YC_IN_P0	
P5_14A	14A	YC_IN_N1	
P5_15A	15A	YC_IN_P3	
P5_16A	16A	YC_IN_N4	
P5_17A	17A	YC_IN_P6	
P5_18A	18A	YC_IN_N7	
P5_19A	19A	YC_IN_P9	
P5_20A	20A	YC_IN_27M_N	
	21A		
P5_22A	22A	SIF_FRM	
P3_23A	23A	AV_ADRS9	
P3_24A	24A	AV_ADRS6	
P3_25A	25A	AV_ADRS3	
P3_26A	26A	AV_ADRS0	
P3_27A	27A	AV_RST_L	
P3_28A	28A	AV_DATA5	
P3_29A	29A	AV_DATA2	
	30A	+5V	
	31A	-5V	
	32A	GND	

P011
VJS2899A096

	1B	GND	
	2B	+12V	
	3B	-12V	
	4B	+7.5V	
	5B	-7.5V	
	6B		
	7B		
	8B		
	9B		
	10B		
	11B		
	12B		
P5_13B	13B	YC_IN_N0	
P5_14B	14B	YC_IN_P2	
P5_15B	15B	YC_IN_N3	
P5_16B	16B	YC_IN_P5	
P5_17B	17B	YC_IN_N6	
P5_18B	18B	YC_IN_P8	
P5_19B	19B	YC_IN_N9	
P5_20B	20B	SIF_CSYNC	
	21B		
P3_21B	22B	AV_CS_VIDEO_L	
P3_23B	23B	AV_ADRS8	
P3_24B	24B	AV_ADRS5	
P3_25B	25B	AV_ADRS2	
P3_26B	26B	AV_IORD_L	
P3_27B	27B	AV_DATA7	
P3_28B	28B	AV_DATA4	
P3_29B	29B	AV_DATA1	
	30B	+5V	
	31B	-5V	
	32B	GND	

P011
VJS2899A096

	1C	GND	
	2C	+12V	
	3C	-12V	
	4C	+7.5V	
	5C	-7.5V	
P30_A30	6C	VIDEO_IN	
P30_A29	7C	Y_IN	
P30_A28	8C	PB_IN	
P30_A27	9C	PR_IN	
P29_B26	10C	4P_Y_IN	
P29_B24	11C	4P_C_IN	
P29_A24	12C	WIDE_IN_L	
P5_13C	13C	YC_IN_P1	
P5_14C	14C	YC_IN_N2	
P5_15C	15C	YC_IN_P4	
P5_16C	16C	YC_IN_N5	
P5_17C	17C	YC_IN_P7	
P5_18C	18C	YC_IN_N8	
P5_19C	19C	YC_IN_27M_P	
	20C		
P5_21C	21C	EAVSAV	
P3_22C	22C	AV_ADRS10	
P3_23C	23C	AV_ADRS7	
P3_24C	24C	AV_ADRS4	
P3_25C	25C	AV_ADRS1	
P3_26C	26C	AV_IOWR_L	
P3_27C	27C	AV_DATA6	
P3_28C	28C	AV_DATA3	
P3_29C	29C	AV_DATA0	
	30C	+5V	
	31C	-5V	
	32C	GND	

P8_19A, P10_21A, P14_21A

P012
VJS2899A096

	1A	GND	
	2A		
	3A		
	4A		
	5A		
	6A		
P10_7A	7A	TBC_RCK_P	
P10_8A	8A	TBC_RHRST	
P10_9A	9A	INCOME_CF1	
P10_10A	10A	REC_C_DATA7	
P10_11A	11A	REC_C_DATA4	
P10_12A	12A	REC_C_DATA1	
P10_13A	13A	REC_Y_DATA6	
P10_14A	14A	REC_Y_DATA3	
P10_15A	15A	REC_Y_DATA0	
P14_13A	16A	INCOM_HST_N	
	17A		
	18A		
	19A		
	20A		
	21A	I2C_DAT	
	22A		
	23A		
	24A		
	25A		
	26A		
	27A		
	28A		
	29A		
	30A		
	31A	+16V	
	32A	GND	

P012
VJS2899A096

	1B	GND	
	2B		
	3B		
	4B		
	5B		
	6B		
P10_7B	7B	TBC_RCK_N	
P10_8B	8B	INCOME_FRM	
	9B		
P10_10B	10B	REC_C_DATA6	
P10_11B	11B	REC_C_DATA3	
P10_12B	12B	REC_C_DATA0	
P10_13B	13B	REC_Y_DATA5	
P10_14B	14B	REC_Y_DATA2	
	15B		
	16B		
	17B		
	18B		
	19B		
	20B		
	21B		
	22B		
	23B		
	24B		
	25B		
	26B		
	27B		
	28B		
	29B		
	30B		
	31B	+16V	
	32B	GND	

P012
VJS2899A096

	1C	GND	
	2C		
	3C		
	4C		
	5C		
	6C		
P10_7C	7C	TBC_RVRST	
P10_8C	8C	INCOME_CF0	
	9C		
P10_10C	10C	REC_C_DATA5	
P10_11C	11C	REC_C_DATA2	
P10_12C	12C	REC_Y_DATA7	
P10_13C	13C	REC_Y_DATA4	
P10_14C	14C	REC_Y_DATA1	
	15C		
	16C		
	17C		
	18C		
	19C		
P10_20C, P14_20C, P8_18C	20C	I2C_CLK	
	21C		
P3_19B	22C	DEC_DAT	
	23C		
	24C		
	25C		
	26C		
	27C		
	28C		
	29C		
	30C		
	31C	+16V	
	32C	GND	

F E D C B A

1 2 3 4 5 6 7 8 9 10

2—6

REVERSE SIDE
MOTHER 5/11

2—6

MOTHER 7/11 SCHEMATIC DIAGRAM

A_PROC (F7)

P013
VJS2899A096

	1A	GND	
	2A	+12V	
	3A	-12V	
	4A	+7.5V	
	5A	-7.5V	
P31_1	6A	D_IN_DATA12G	
P31_4	7A	D_IN_DATA34G	
	8A		
P31_7	9A	D_OUT_DATA12G	
P31_10	10A	D_OUT_DATA34G	
	11A		
	12A		
	13A		
P29_A20	14A	WIDE_OUT_L	
	15A		
P17_17C	16A	ADSD34	
P17_19A	17A	MCK2	
P15_18A	18A	BCK1	
P15_19A	19A	MCK1	
P18_20A	20A	CUE_BCK	
P15_21A	21A	CUE_MIX_DATA	
P19_19C	22A	PB_FRP	
P3_23A	23A	AV_ADRS9	
P3_24A	24A	AV_ADRS6	
P3_25A	25A	AV_ADRS3	
P3_26A	26A	AV_ADRS0	
P3_27A	27A	AV_RST_L	
P3_28A	28A	AV_DATA5	
P3_29A	29A	AV_DATA2	
	30A	+5V	
	31A	-5V	
	32A	GND	

P013
VJS2899A096

	1B	GND	
	2B	+12V	
	3B	-12V	
	4B	+7.5V	
	5B	-7.5V	
P31_2	6B	D_IN_DATA12N	
P31_5	7B	D_IN_DATA34N	
	8B		
P31_8	9B	D_OUT_DATA12N	
P31_11	10B	D_OUT_DATA34N	
	11B		
P7_12B	12B	YOBI_1	
P7_13B	13B	YOBI_2	
P11_9B	14B	AUDIO_JOG0	
	15B		
P17_18A	16B	BCK2	
P17_19B	17B	WCK2	
P15_18B	18B	DASD12	
P15_19B	19B	WCK1	
P18_20B	20B	CUE_MCK	
P18_21B	21B	CUE_WCK	
P3_22A	22B	AV_CS_APROC_L	
P3_23B	23B	AV_ADRS8	
P3_24B	24B	AV_ADRS5	
P3_25B	25B	AV_ADRS2	
P3_26B	26B	AV_IORD_L	
P3_27B	27B	AV_DATA7	
P3_28B	28B	AV_DATA4	
P3_29B	29B	AV_DATA1	
	30B	+5V	
	31B	-5V	
	32B	GND	

P013
VJS2899A096

	1C	GND	
	2C	+12V	
	3C	-12V	
	4C	+7.5V	
	5C	-7.5V	
P31_3	6C	D_IN_DATA12P	
P31_6	7C	D_IN_DATA34P	
	8C		
P31_9	9C	D_OUT_DATA12P	
P31_12	10C	D_OUT_DATA34P	
	11C		
	12C		
	13C		
P1_19C	14C	AUDIO_JOG1	
	15C		
P17_18B	16C	DASD34	
P15_17C	17C	ADSD12	
P15_18C	18C	DASDLR	
P4_2A	19C	REC_FRP	
P15_20C	20C	CUE_MET_DATA	
	21C		
P3_22A	22C	AV_ADRS10	
P3_23C	23C	AV_ADRS7	
P3_24C	24C	AV_ADRS4	
P3_25C	25C	AV_ADRS1	
P3_26C	26C	AV_IOWR_L	
P3_27C	27C	AV_DATA6	
P3_28C	28C	AV_DATA3	
P3_29C	29C	AV_DATA0	
	30C	+5V	
	31C	-5V	
	32C	GND	

P014
VJS2899A096

	1A	GND	
	2A		
	3A		
	4A		
	5A		
P10_6A	6A	18M_CK_P	
	7A		
	8A		
	9A		
P6_10A	10A	S_REC_AUD12G	
P6_11A	11A	S_PB_AUD12	
P6_12A	12A	S_PB_AUD34G	
P12_16A	13A	INCOM_HST_N	
	14A		
	15A		
P10_16A	16A	FS256_N	
P10_17A	17A	FS64_PB	
P10_18A	18A	REC_FRM	
P10_19A	19A	PB_DATA12	
P10_20A	20A	FRM5	
P8_19A, P10_21A, P12_21A	21A	I2C_DAT	
	22A		
	23A		
	24A		
	25A		
	26A		
	27A		
	28A		
	29A		
	30A		
	31A	+16V	
	32A	GND	

P014
VJS2899A096

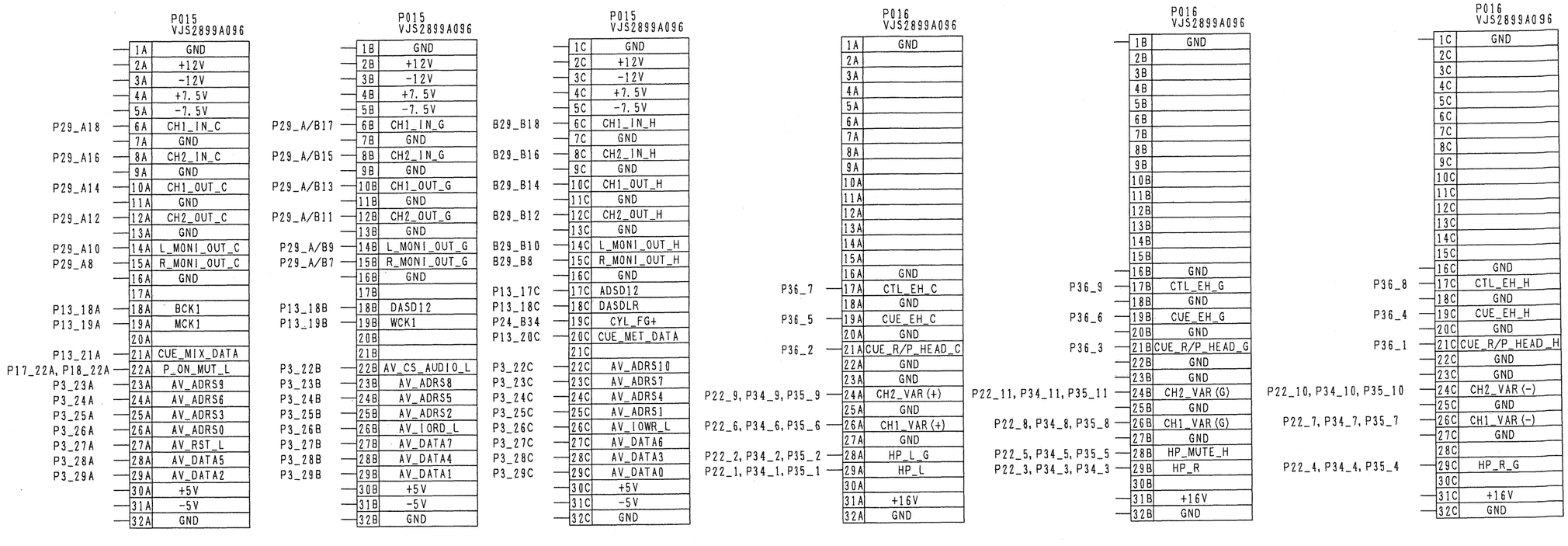
	1B	GND	
	2B		
	3B		
	4B		
P10_5B	5B	TAPE_REV_H	
P10_6B	6B	18M_CK_N	
	7B		
	8B		
	9B		
P6_10B	10B	S_REC_AUD34	
P6_11B	11B	S_PB_AUD12G	
P6_12B	12B	DAUDCK_P	
P8_13B	13B	REF_FRAME	
	14B		
P10_15B	15B	REC_DATA12	
P10_16B	16B	FS256_P	
P10_17B	17B	VCLK	
P10_18B	18B	INH	
P10_19B	19B	PB_DATA34	
P9_18A, P1_10A	20B	FEND	
	21B		
	22B		
	23B		
	24B		
	25B		
	26B		
	27B		
	28B		
	29B		
	30B		
	31B	+16V	
	32B	GND	

P014
VJS2899A096

	1C	GND	
	2C		
	3C		
	4C		
	5C		
	6C		
	7C		
	8C		
P6_9C	9C	S_REC_AUD12	
P6_10C	10C	S_REC_AUD34G	
P6_11C	11C	S_PB_AUD34	
P6_12C	12C	DAUDCK_N	
P8_13C	13C	REF_HST_N	
	14C		
P10_15C	15C	REC_DATA34	
P10_16C	16C	FS	
P10_17C	17C	FS64	
P10_18C	18C	FS_P	
P10_19C	19C	PB_FRM_A	
P10_20C, P12_20C, P8_18C	20C	I2C_CLK	
	21C		
	22C		
	23C		
	24C		
	25C		
	26C		
	27C		
	28C		
	29C		
	30C		
	31C	+16V	
	32C	GND	

MOTHER 8/11 SCHEMATIC DIAGRAM

ADDA_1 (F8)



MOTHER 9/11 SCHEMATIC DIAGRAM

ADDA_2 (H1)

P017
VJS2899A096

	1A	GND	
	2A	+12V	
	3A	-12V	
	4A	+7.5V	
	5A	-7.5V	
	6A		
	7A	GND	
	8A		
	9A	GND	
	10A		
	11A	GND	
	12A		
	13A	GND	
	14A		
	15A		
	16A		
	17A		
P13_16B	18A	BCK2	
P13_17A	19A	MCK2	
	20A		
	21A		
P18_22A, P15_22A	22A	P_ON_MUT_L	
P3_23A	23A	AV_ADRS9	
P3_24A	24A	AV_ADRS6	
P3_25A	25A	AV_ADRS3	
P3_26A	26A	AV_ADRS0	
P3_27A	27A	AV_RST_L	
P3_28A	28A	AV_DATA5	
P3_29A	29A	AV_DATA2	
	30A	+5V	
	31A	-5V	
	32A	GND	

P017
VJS2899A096

	1B	GND	
	2B	+12V	
	3B	-12V	
	4B	+7.5V	
	5B	-7.5V	
	6B		
	7B	GND	
	8B		
	9B	GND	
	10B		
	11B	GND	
	12B		
	13B	GND	
	14B		
	15B		
	16B		
	17B		
P13_16C	18B	DASD34	
P13_17B	19B	WCK2	
	20B		
	21B		
P3_22B	22B	AV_CS_AUDIO_L	
P3_23B	23B	AV_ADRS8	
P3_24B	24B	AV_ADRS5	
P3_25B	25B	AV_ADRS2	
P3_26B	26B	AV_IORD_L	
P3_27B	27B	AV_DATA7	
P3_28B	28B	AV_DATA4	
P3_29B	29B	AV_DATA1	
	30B	+5V	
	31B	-5V	
	32B	GND	

P017
VJS2899A096

	1C	GND	
	2C	+12V	
	3C	-12V	
	4C	+7.5V	
	5C	-7.5V	
	6C		
	7C	GND	
	8C		
	9C	GND	
	10C		
	11C	GND	
	12C		
	13C	GND	
	14C		
	15C		
	16C		
P13_16A	17C	ADSD34	
	18C		
	19C		
	20C		
	21C		
P3_22C	22C	AV_ADRS10	
P3_23C	23C	AV_ADRS7	
P3_24C	24C	AV_ADRS4	
P3_25C	25C	AV_ADRS1	
P3_26C	26C	AV_IOWR_L	
P3_27C	27C	AV_DATA6	
P3_28C	28C	AV_DATA3	
P3_29C	29C	AV_DATA0	
	30C	+5V	
	31C	-5V	
	32C	GND	

CUE (H2)

P018
VJS2899A096

	1A	GND	
	2A	+12V	
	3A	-12V	
	4A	+7.5V	
	5A	-7.5V	
P29_A30	6A	CUE_IN_C	
	7A	GND	
P29_A28	8A	CUE_OUT_C	
	9A	GND	
	10A		
	11A		
	12A		
	13A		
	14A		
	15A		
	16A		
	17A		
	18A		
	19A		
P13_20A	20A	CUE_BCK	
P13_21A	21A	CUE_MIX_DATA	
P15/17_22A	22A	P_ON_MUT_L	
P15/17_23A	23A	AV_ADRS9	
P15/17_24A	24A	AV_ADRS6	
P15/17_25A	25A	AV_ADRS3	
P15/17_26A	26A	AV_ADRS0	
P15/17_27A	27A	AV_RST_L	
P15/17_28A	28A	AV_DATA5	
P15/17_29A	29A	AV_DATA2	
	30A	+5V	
	31A	-5V	
	32A	GND	

P018
VJS2899A096

	1B	GND	
	2B	+12V	
	3B	-12V	
	4B	+7.5V	
	5B	-7.5V	
P29_A/B29	6B	CUE_IN_G	
	7B	GND	
P29_A/B27	8B	CUE_OUT_G	
	9B	GND	
	10B		
	11B		
	12B		
	13B		
	14B		
	15B		
	16B		
	17B		
	18B		
	19B		
P13_20B	20B	CUE_MCK	
P13_21B	21B	CUE_WCK	
P15/17_22B	22B	AV_CS_AUDIO_L	
P15/17_23B	23B	AV_ADRS8	
P15/17_24B	24B	AV_ADRS5	
P15/17_25B	25B	AV_ADRS2	
P15/17_26B	26B	AV_IORD_L	
P15/17_27B	27B	AV_DATA7	
P15/17_28B	28B	AV_DATA4	
P15/17_29B	29B	AV_DATA1	
	30B	+5V	
	31B	-5V	
	32B	GND	

P018
VJS2899A096

	1C	GND	
	2C	+12V	
	3C	-12V	
	4C	+7.5V	
	5C	-7.5V	
P29_B30	6C	CUE_IN_H	
	7C	GND	
P29_B28	8C	CUE_OUT_H	
	9C	GND	
	10C		
	11C		
	12C		
	13C		
	14C		
	15C		
	16C		
	17C		
P24_B34	18C	CYL_FG+	
	19C		
P13_20C	20C	CUE_MET_DATA	
	21C		
P5/17_22C	22C	AV_ADRS10	
P5/17_23C	23C	AV_ADRS7	
P5/17_24C	24C	AV_ADRS4	
P5/17_25C	25C	AV_ADRS1	
P5/17_26C	26C	AV_IOWR_L	
P5/17_27C	27C	AV_DATA6	
P5/17_28C	28C	AV_DATA3	
P5/17_29C	29C	AV_DATA0	
	30C	+5V	
	31C	-5V	
	32C	GND	

F E D C B A

1 2 3 4 5 6 7 8 9 10

2—9

MOTHER 10/11 SCHEMATIC DIAGRAM

EQ (H3)

P019
VJS2899A096

	1A	GND	
	2A	+12V	
	3A	-12V	
	4A	+7.5V	
	5A	-7.5V	
	6A	GND	
P1_6B	7A	RTV_SPD_PB	
P1_7B	8A	REF_CLK	
P1_8A	9A	ATF_P	
	10A	GND	
P9_8B, P20_11A	11A	RECCTRL_A	
P9_9B	12A	PB_DAT_R_N	
P9_10B	13A	PB_DAT_P_P	
P9_11B	14A	PB_CLK_P_N	
P9_12B	15A	VTB_D_P5	
P9_13B	16A	VTB_D_N4	
P9_14B	17A	VTB_D_P2	
P9_15B	18A	VTB_D_N1	
P9_16C, P20_19A, P1_17B	19A	RP_HSW	
P1_16C	20A	REC_ENV	
P10_9B	21A	V_AD	
P10_6C	22A	VS_CS	
P3_18A, P20_23A	23A	RF_CLK	
	24A		
	25A	GND	
P20_26A	26A	PB_OUT_P	
	27A	GND	
P20_28A	28A	RP_OUT_P	
	29A	GND	
	30A	+5V	
	31A	-5V	
	32A	GND	

P019
VJS2899A096

	1B	GND	
	2B	+12V	
	3B	-12V	
	4B	+7.5V	
	5B	-7.5V	
	6B	GND	
P1_6C	7B	RTV_SPD_RP	
	8B	GND	
P1_8B	9B	ATF_R	
	10B	GND	
P9_8C, P20_11B	11B	RECCTRL_B	
P9_9C	12B	PB_CLK_R_P	
P9_10C	13B	PB_DAT_P_N	
P9_11C	14B	VTB_CLK_P	
P9_12C	15B	VTB_D_N5	
P9_13C	16B	VTB_D_P3	
P9_14C	17B	VTB_D_N2	
P9_15C	18B	VTB_D_P0	
P9_16B, P20_19B, P1_17A	19B	PB_HSW	
P1_16B	20B	PB_ENV	
P10_9C	21B	VS_CLK	
	22B		
P3_18B, P20_23B	23B	RF_DATA	
	24B		
	25B	GND	
P20_26B	26B	PB_OUT_N	
	27B	GND	
P20_28B	28B	RP_OUT_N	
	29B	GND	
	30B	+5V	
	31B	-5V	
	32B	GND	

P019
VJS2899A096

	1C	GND	
	2C	+12V	
	3C	-12V	
	4C	+7.5V	
	5C	-7.5V	
	6C	GND	
	7C	GND	
	8C	GND	
	9C	GND	
	10C	GND	
P9_9A	11C	PB_DAT_R_P	
P9_10A	12C	PB_CLK_R_N	
P9_11A	13C	PB_CLK_P_P	
P9_12A	14C	VTB_CLK_N	
P9_13A	15C	VTB_D_P4	
P9_14A	16C	VTB_D_N3	
P9_15A	17C	VTB_D_P1	
P9_16A	18C	VTB_D_N0	
P13_22A	19C	PB_FRP	
P9_20C, P20_20C	20C	PBH	
P9_23B	21C	VS_DATA	
	22C		
P3_18C, P20_23C	23C	RF_EQLD_H	
	24C		
	25C	GND	
P20_26C	26C	PB_OUT_G	
	27C	GND	
P20_28C	28C	RP_OUT_G	
	29C	GND	
	30C	+5V	
	31C	-5V	
	32C	GND	

RF_AMP (H4)

P020
VJS2899A096

	1A	GND	
	2A	+12V	
	3A	-12V	
	4A	+7.5V	
	5A	-7.5V	
	6A	GND	
	7A		
P9_6A	8A	EE_DATA_P	
P9_6C	9A	EE_CLK_P	
P9_7B	10A	FECTRL0	
P9_8B	11A	RECCTRL_A	
P33_A9	12A	A_REC	
	13A	GND	
	14A	GND	
	15A	GND	
	16A	GND	
	17A		
	18A		
P9_16C, P19_19A, P1_17B	19A	RP_HSW	
P1_16C	20A	REC_ENV	
	21A	GND	
	22A	GND	
P3_18A, P19_23A	23A	RF_CLK	
P3_19A	24A	RF_HALD_H	
P33_A26	25A	PB_PRE_G	
P19_26A	26A	PB_OUT_P	
P33_A24	27A	RP_PRE_G	
P19_28A	28A	RP_OUT_P	
	29A	GND	
	30A	+5V	
	31A	-5V	
	32A	GND	

P020
VJS2899A096

	1B	GND	
	2B	+12V	
	3B	-12V	
	4B	+7.5V	
	5B	-7.5V	
	6B	GND	
P33_A7	7B	RE_A_CURR	
P9_6B	8B	EE_DATA_N	
P9_7A	9B	EE_CLK_N	
P9_7C	10B	FECTRL1	
P9_8C	11B	RECCTRL_B	
P33_B9	12B	B_REC	
P33_A11	13B	RESET	
P33_A13	14B	RECDATA_P	
P33_A17	15B	REC_A_CURR	
P33_A18	16B	REC_A_FREQ	
P33_A20	17B	RP_A	
P33_A21	18B	PB_A	
P9_16B, P19_19B, P1_17A	19B	PB_HSW	
	20B	PB_ENV	
	21B	GND	
	22B	GND	
P3_18B, P19_23B	23B	RF_DATA	
	24B	GND	
P33_A25	25B	PB_PRE_P	
P19_26B	26B	PB_OUT_N	
P33_A23	27B	RP_PRE_P	
	28B	RP_OUT_N	
	29B	GND	
	30B	+5V	
	31B	-5V	
	32B	GND	

P020
VJS2899A096

	1C	GND	
	2C	+12V	
	3C	-12V	
	4C	+7.5V	
	5C	-7.5V	
	6C	GND	
P33_B7	7C	RE_B_CURR	
	8C	GND	
	9C	GND	
P9_8A	10C	RECI	
	11C		
P33_A10	12C	RECA	
P33_B11	13C	REC_TESTMOD	
P33_B13	14C	RECDATA_N	
P33_B17	15C	REC_B_CURR	
P33_B18	16C	REC_B_FREQ	
P33_B20	17C	RP_B	
P33_B21	18C	PB_B	
P1_17C	19C	RE_HSW	
P9_20C, P19_20C	20C	PBH	
	21C	GND	
	22C	GND	
	23C	GND	
	24C	GND	
B33_B25	25C	PB_PRE_N	
P19_26C	26C	PB_OUT_G	
P33_B23	27C	RP_PRE_N	
P19_28C	28C	RP_OUT_G	
	29C	GND	
	30C	+5V	
	31C	-5V	
	32C	GND	

HEAD_BUFFER

P033 VJP3375A060

A	NO	B
GND	1	GND
GND	2	GND
+12V	3	+12V
+7.5V	4	+7.5V
-7.5V	5	-7.5V
GND	6	GND
P20_7B RE_A_CURR	7	RE_B_CURR P20_7C
P20_10A FECTRL0	8	FECTRL1 P20_10B
P20_12A A_REC	9	B_REC P20_12B
P20_12C RECA	10	
P20_13B RESET	11	REC_TESTMOD P20_13C
GND	12	GND
P20_14B RECDATA_P	13	RECDATA_N P20_14C
GND	14	GND
GND	15	GND
GND	16	GND
P20_15B REC_A_CURR	17	REC_B_CURR P20_15C
P20_16B REC_A_FREQ	18	REC_B_FREQ P20_16C
GND	19	GND
P20_17B RP_A	20	RP_B P20_17C
P20_18B PB_A	21	PB_B P20_18C
GND	22	GND
P20_27B RP_PRE_P	23	RP_PRE_N P20_27C
P20_27A RP_PRE_G	24	RP_PRE_G
P20_25B PB_PRE_P	25	PB_PRE_N P20_25C
P20_25A PB_PRE_G	26	PB_PRE_G
J7 LAND ● +5V	27	+5V
-5V	28	-5V
GND	29	GND
GND	30	GND

MOTHER 11/11 SCHEMATIC DIAGRAM

TO V/S_JACK

P030 VJS3375B060

	A	NO	B	
P3_17B	CTS	1	RTS	P3_17C
P3_16C	RXD	2	TXD	P3_17A
P3_16A	DSR	3	DTR	P3_16B
P3_15B	STB_CLK16	4	232C_SPARE	P3_15C
P3_14C	P_SERIAL_OUT	5	SERIAL_CLK	P3_15A
P3_14A	RET_GND	6	P_SERIAL_IN	P3_14B
P3_13B	SYS_SC_CORSE_1	7	SYS_SC_CORSE_2	P3_13C
P3_12C	SYS_H_PHASE	8	SYS_SC_PHASE	P3_13A
P3_12A	C_GAIN	9	HUE	P3_12B
P3_11B	VIDEO_GAIN	10	SET_UP	P3_11C
	+5V	11	GND	
P3_10A	TRANSMIT_A_OUT	12	TRANSMIT_B_OUT	P3_10B
P3_9B	RECEIVE_A_OUT	13	RECEIVE_B_OUT	P3_9C
P3_8C	TRANSMIT_A_IO	14	TRANSMIT_B_IO	P3_9A
P3_8A	RECEIVE_A_IO	15	RECEIVE_B_IO	P3_8B
	+5V	16	GND	
	-12V	17	-12V	
	+12V	18	+12V	
P7_12C	PR_OUT	19	PR_OUT_G	P7_12A
P7_13C	PB_OUT	20	PB_OUT_G	P7_13A
P7_11C	Y_OUT	21	Y_OUT_G	P7_11A
P7_10C	VIDEO_OUT3	22	VIDEO_OUT3_G	P7_10A
P7_9C	VIDEO_OUT2	23	VIDEO_OUT2_G	P7_9A
P7_8C	VIDEO_OUT1	24	VIDEO_OUT1_G	P7_8A
	GND	25	GND	
P7_6C	REF_IN	26	REF_IN_G	P7_6A
P11_9C	PR_IN	27	PR_IN_G	P11_9A
P11_8C	PB_IN	28	PB_IN_G	P11_8A
P11_7C	Y_IN	29	Y_IN_G	P11_7A
P11_6C	VIDEO_IN	30	VIDEO_IN_G	P11_6A

TO A_JACK

P029 VJS3375B060

	A	NO	B	
	+12V	1	+12V	
	-12V	2	-12V	
	GND	3	GND	
P3_7A	TC_OUT_C	4	TC_OUT_H	P3_6C
	GND	5	GND	
P3_6B	TC_IN_C	6	TC_IN_H	P3_6A
P15_15B	R_MONI_OUT_G	7	R_MONI_OUT_G	
P15_15A	R_MONI_OUT_C	8	R_MONI_OUT_H	P15_15C
P15_14B	L_MONI_OUT_G	9	L_MONI_OUT_G	
P15_14A	L_MONI_OUT_C	10	L_MONI_OUT_H	P15_14C
P15_12B	CH2_OUT_G	11	CH2_OUT_G	
P15_12A	CH2_OUT_C	12	CH2_OUT_H	P15_12C
P15_10B	CH1_OUT_G	13	CH1_OUT_G	
P15_10A	CH1_OUT_C	14	CH1_OUT_H	P15_10C
P15_8B	CH2_IN_G	15	CH2_IN_G	
P15_8A	CH2_IN_C	16	CH2_IN_H	P15_8C
P15_6B	CH1_IN_G	17	CH1_IN_G	
P15_6A	CH1_IN_C	18	CH1_IN_H	P15_6C
	4P_C_OUT_G	19	4P_C_OUT_G	P7_15A
P13_14A	WIDE_OUT_L	20	4P_C_OUT	P7_15C
	4P_Y_OUT_G	21	4P_Y_OUT_G	P7_14A
		22	4P_Y_OUT	P7_14C
	4P_C_IN_G	23	4P_C_IN_G	P11_11A
P11_12C	WIDE_IN_L	24	4P_C_IN	P11_11C
	4P_Y_IN_G	25	4P_Y_IN_G	P11_10A
		26	4P_Y_IN	P11_10C
	CUE_OUT_G	27	CUE_OUT_G	P18_8B
P18_8A	CUE_OUT_C	28	CUE_OUT_H	P18_8C
	CUE_IN_G	29	CUE_IN_G	P18_6B
P18_6A	CUE_IN_C	30	CUE_IN_H	P18_6C

TO M_IF

P023 VJP2891A030

	1	GND	
	2	GND	
	3	GND	
	4	+12V	
	5	-12V	
	6	+5V	
P4_27A	7	R_STAND_L2S	
P4_28A	8	R_STAND_S2L	
P4_20C	9	PINCH_ON	
P4_21C	10	PINCH_OFF	
P4_22C	11	S_BRAKE_ON	
P4_23C	12	S_BRAKE_OFF	
P4_24C	13	T_BRAKE_ON	
P4_25C	14	T_BRAKE_OFF	
P4_26C	15	M_STOPPER_OFF	
P4_27C	16	M_STOPPER_ON	
P2_23C	17	TRM1	
P2_24C	18	TRM2	
P2_23B	19	TRM3	
P2_25C	20	SRM1	
P2_26C	21	SRM2	
P2_25B	22	SRM3	
P2_27C	23	CAM1	
P2_28C	24	CAM2	
P2_27B	25	CAM3	
P2_29C	26	CYL_M1	
P2_30C	27	CYL_M2	
P2_29B	28	CYL_M3	
P1_18A	29	LOAD_FG	
P2_6B	30	CLE_ON_H	

TO M_IF

P024 VJP3418A080

	A	NO	B	
P2_6C	CHECK_LINE_2	1	CASSET_POS_1	P10_30A
P10_30B	CASSET_POS_2	2	CASSET_POS_3	P10_30C
P4_14B	CASSET_MID_H	3	GND	
P4_17C	CASSET_INR_H	4	CASSET_INL_H	P4_18A
P4_18B	CASSET1_H	5	DEW_ON_H	P4_18C
P4_19A	CASSET2_H	6	DEW_GND	P4_19C
P4_19B	CASSET_DOWN_H	7	CASSET_UP_L	P4_20A
P4_20B	MECHA_POS2_L	8	MECHA_POS1_L	P4_21A
P4_21B	SAFETY_TAB	9	MECHA_POS3_L	P4_22A
P4_22B	REEL_POS2_H	10	CAST_DOWN_L	P4_23A
P4_23B	TAPE_SENSOR_ON	11	REEL_POS1_H	P4_24A
P4_24B	F_LOAD_IN	12	F_LOAD_OUT	P4_25B
P4_25A	TAPE_START_L	13	TAPE_END_L	P4_26A
P4_26B	LOADING	14	UNLOADING	P4_27B
P2_7A	TENSION	15	TENS_GND	P2_7B
P2_7C	CYLH_V+	16	CYLH_V-	P2_8A
P2_4C	CYLH1+	17	CYLH1-	P2_4B
P2_5B	CYLH2+	18	CYLH2-	P2_5A
P2_6A	CYLH3+	19	CYLH3-	P2_5C
P2_9B	TRH_V+	20	TRH_V-	P2_9C
P2_10A	TRH1+	21	TRH1-	P2_10B
P2_10C	TRH2+	22	TRH2-	P2_11A
P2_11B	TRH3+	23	TRH3-	P2_11C
P2_12A	SRH_V+	24	SRH_V-	P2_12B
P2_12C	SRH1+	25	SRH1-	P2_13A
P2_13B	SRH2+	26	SRH2-	P2_13C
P2_14A	SRH3+	27	SRH3-	P2_14B
P2_14C	CAH_V+	28	CAH_V-	P2_15A
P2_15B	CAH1+	29	CAH1-	P2_15C
P2_16A	CAH2+	30	CAH2-	P2_16B
P2_16C	CAH3+	31	CAH3-	P2_17A
P2_17B	CAP_FG_VCC	32	CAP_FG_GND	P2_17C
P2_18A	CAP_FG1_M	33	CAP_FG2_M	P2_18B
P2_18C	CYL_PG+	34	CYL_FG+	P2_19A
P2_19B	T_FG_V	35	T_FG_GND	P2_19C
P2_20A	T_FG1_M	36	T_FG2_M	P2_20B
P2_20C	S_FG_V	37	S_FG_GND	P2_21A
P2_21B	S_FG1_M	38	S_FG2_M	P2_21C
P2_22B	CYL_PF_GND	39	CTL_GND	P2_8C
P2_8B	CTL_REC_CURR	40	CTL_PRE	P2_9A

TO POWER

P027 VJP2824B008

1	-7.5V	
2	+7.5V	
3	-12V	
4	+12V	
5	GND	
6	GND	
7	GND	
8	GND	

P026 VJP2824B006

1	GND	
2	GND	
3	GND	
4	-5V	
5	+5V	
6	+5V	

P025 VJP2824B003

P3_7B	1	FAN_PULSE1	
J8 LAND	2	GND_M	
	3	+16V	

TO FAN_MOTOR

P032 VJP1230T

	1	+12V	
P3_7C	2	FAN_PULSE2	
	3	GND	

TO AC_HEAD_I/F

P036 VJP1250T

P16_21C	1	CUE_R/P_HEAD_H	
P16_21A	2	CUE_R/P_HEAD_C	
P16_21B	3	CUE_R/P_HEAD_G	
P16_19C	4	CUE_EH_H	
P16_19A	5	CUE_EH_C	
P16_19B	6	CUE_EH_G	
P16_17A	7	CTL_EH_C	
P16_17C	8	CTL_EH_H	
P16_17B	9	CTL_EH_G	
	10		

TO FRONT

P021 VJP1930T

P4_28B	1	FR_SERI0A	
P4_28C	2	FR_SERI0B	
P4_29B	3	FR_SERI1A	
P4_29C	4	FR_SERI1B	
J3 LAND	5	+5V	
	6	+5V	
J4 LAND	7	+5V	
	8	+5V	
J5 LAND	9	GND	
	10	GND	
	11	GND	
	12	GND	
	13	GND	
	14	-12V	
	15	+12V	

TO FRONT

P022 VJP1251T

P16_29A, P34_1, P35_1	1	HP_L	
P16_28A, P34_2, P35_2	2	HP_L_G	
P16_29B, P34_3, P35_3	3	HP_R	
P16_29C, P34_4, P35_4	4	HP_R_G	
P16_28B, P34_5, P35_5	5	HP_MUTE_H	
P16_26A, P34_6, P35_6	6	CH1_VAR (+)	
P16_26C, P34_7, P35_7	7	CH1_VAR (-)	
P16_26B, P34_8, P35_8	8	CH1_VAR (G)	
P16_24A, P34_9, P35_9	9	CH2_VAR (+)	
P16_24C, P34_10, P35_10	10	CH2_VAR (-)	
P16_24B, P34_11, P35_11	11	CH2_VAR (G)	

P034 IL-S_ST

P16_29A, P22_1, P35_1	1	HP_L	
P16_28A, P22_2, P35_2	2	HP_L_G	
P16_29B, P22_3, P35_3	3	HP_R	
P16_29C, P22_4, P35_4	4	HP_R_G	
P16_28B, P22_5, P35_5	5	HP_MUTE_H	
P16_26A, P22_6, P35_6	6	CH1_VAR (+)	
P16_26C, P22_7, P35_7	7	CH1_VAR (-)	
P16_26B, P22_8, P35_8	8	CH1_VAR (G)	
P16_24A, P22_9, P35_9	9	CH2_VAR (+)	
P16_24C, P22_10, P35_10	10	CH2_VAR (-)	
P16_24B, P22_11, P35_11	11	CH2_VAR (G)	

P035 IL-S_ST

P16_29A, P22_1, P34_1	1	HP_L	
P16_28A, P22_2, P34_2	2	HP_L_G	
P16_29B, P22_3, P34_3	3	HP_R	
P16_29C, P22_4, P34_4	4	HP_R_G	
P16_28B, P22_5, P34_5	5	HP_MUTE_H	
P16_26A, P22_6, P34_6	6	CH1_VAR (+)	
P16_26C, P22_7, P34_7	7	CH1_VAR (-)	
P16_26B, P22_8, P34_8	8	CH1_VAR (G)	
P16_24A, P22_9, P34_9	9	CH2_VAR (+)	
P16_24C, P22_10, P34_10	10	CH2_VAR (-)	
P16_24B, P22_11, P34_11	11	CH2_VAR (G)	

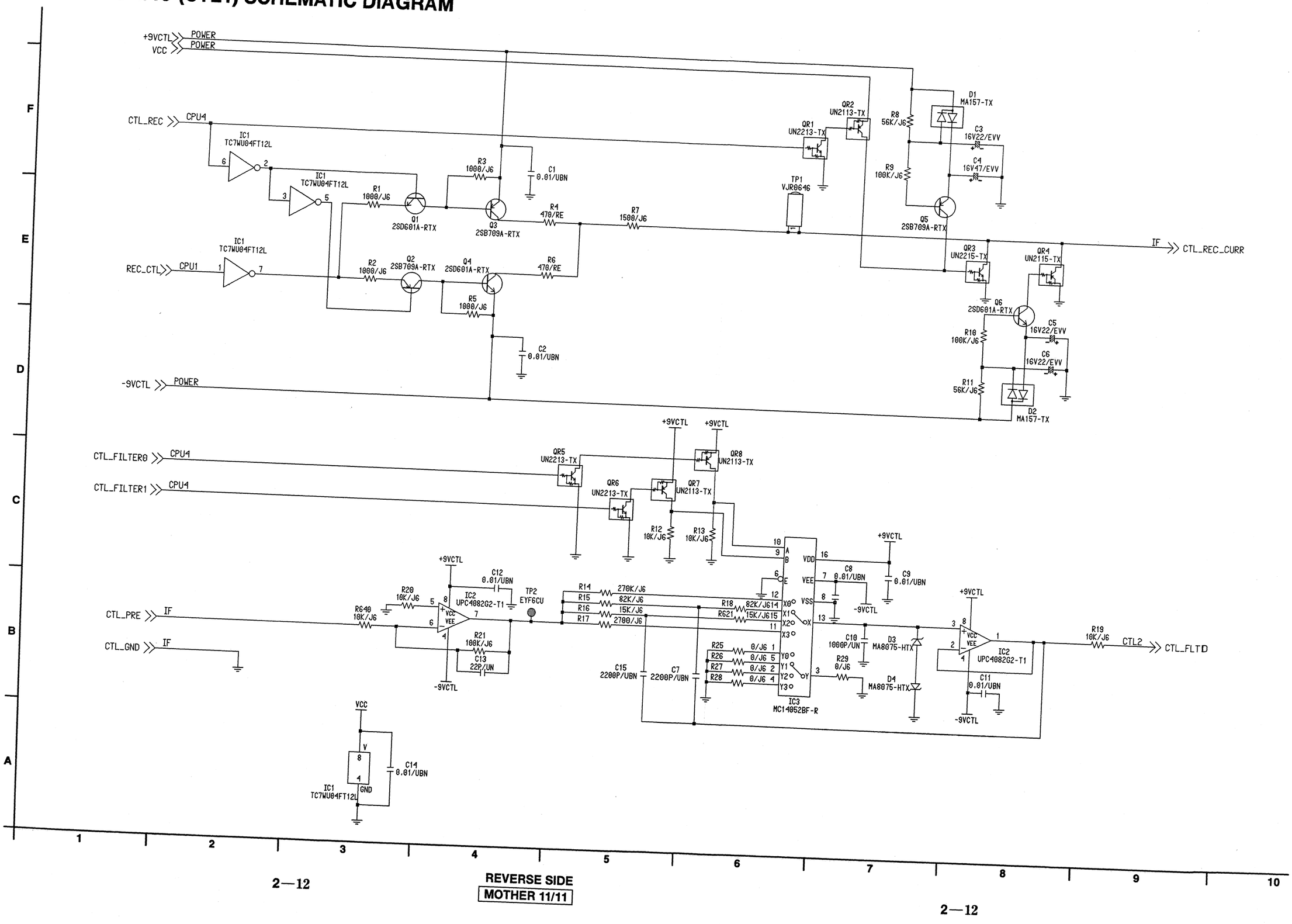
TO AES/EBU

P031 VJP1239T

P13_6A	1	D_IN_DATA12G
P13_6B	2	D_IN_DATA12N
P13_6C	3	D_IN_DATA12P
P13_7A	4	D_IN_DATA34G
P13_7B	5	D_IN_DATA34N
P13_7C	6	D_IN_DATA34P
P13_9A	7	D_OUT_DATA12G
P13_9B	8	D_OUT_DATA12N
P13_9C	9	D_OUT_DATA12P
P13_10A	10	D_OUT_DATA34G
P13_10B	11	D_OUT_DATA34N
P13_10C	12	D_OUT_DATA34P

2—11

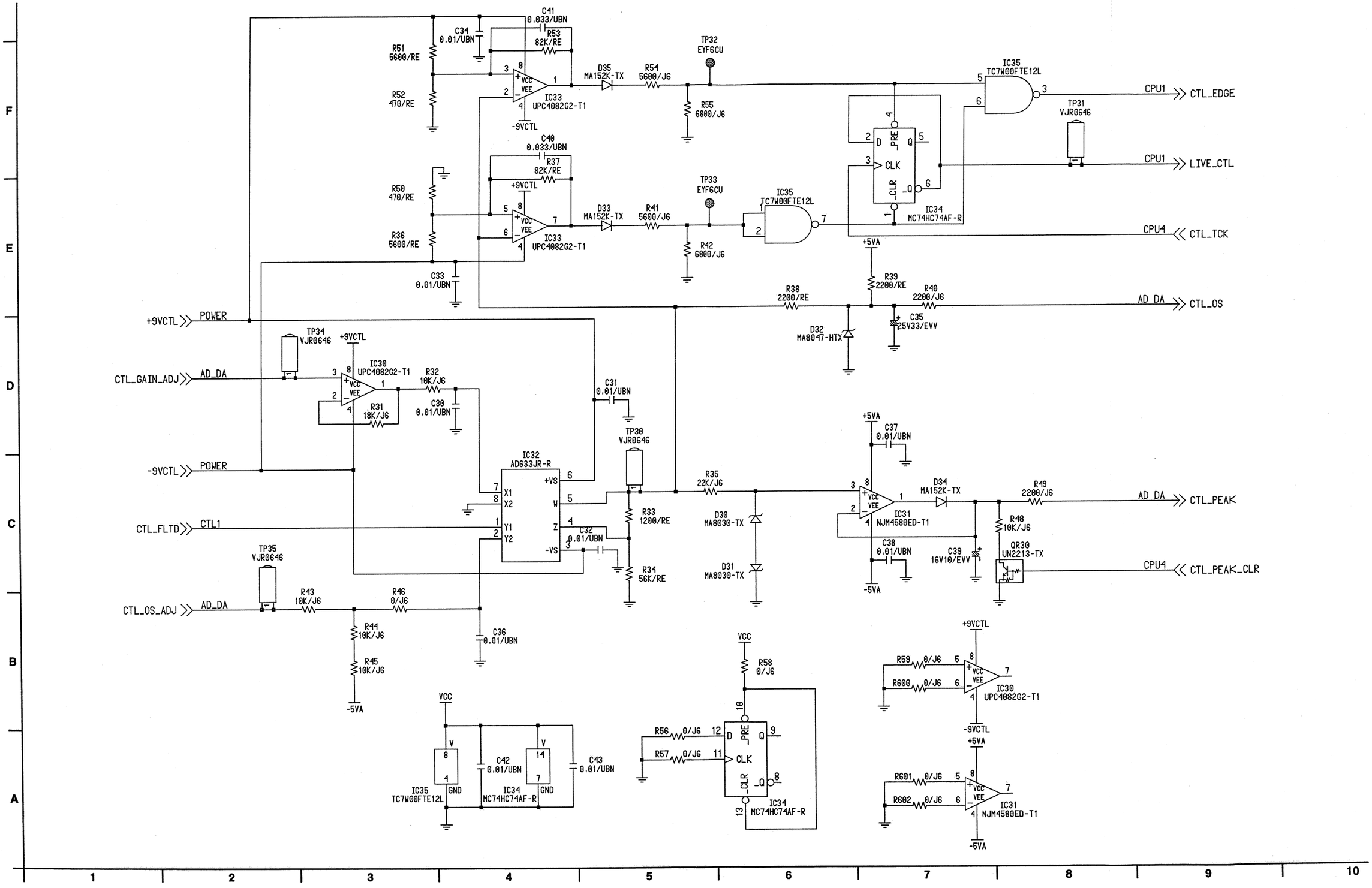
F1 SERVO 1/19 (CTL1) SCHEMATIC DIAGRAM



REVERSE SIDE
MOTHER 11/11

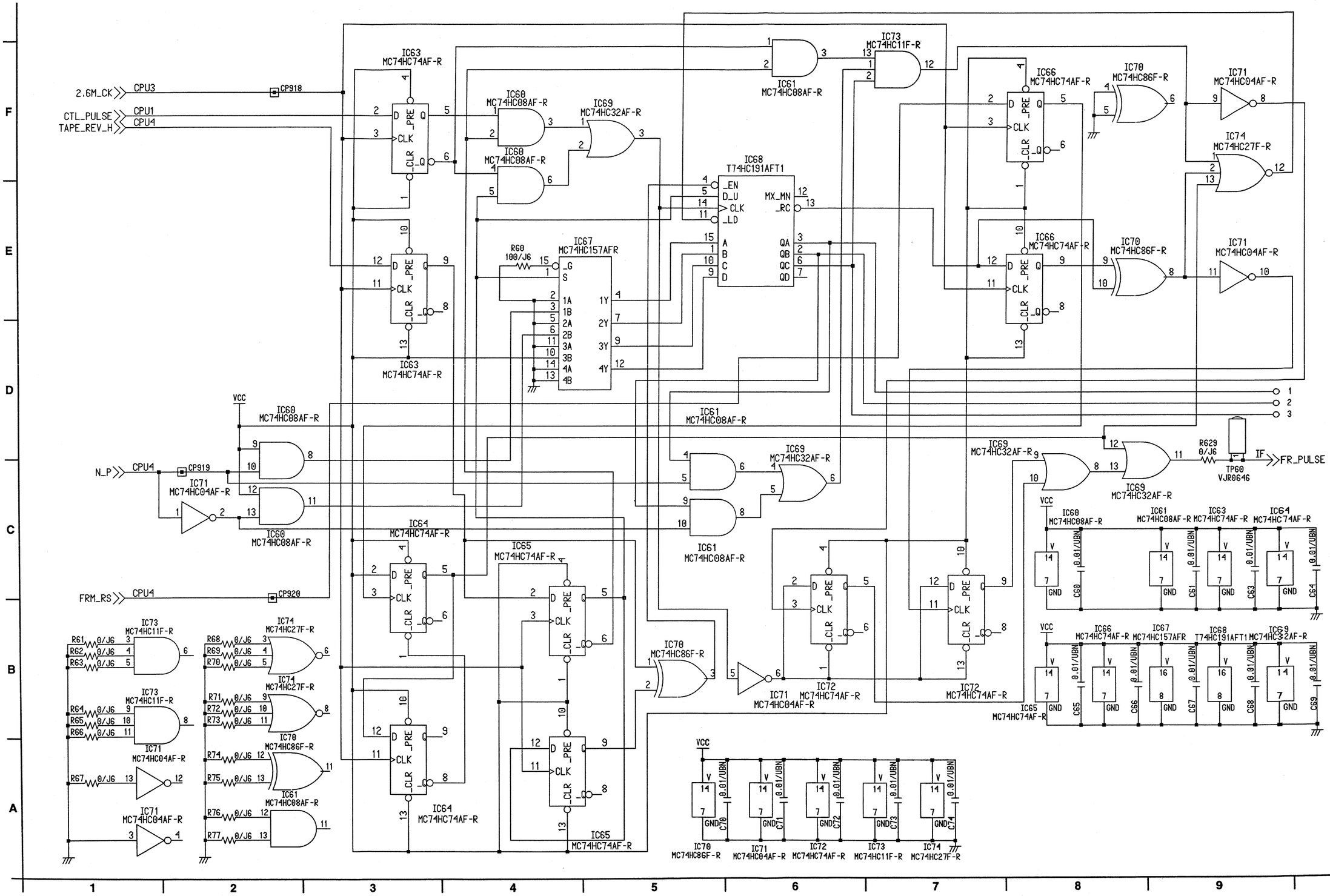
2—12

F1 SERVO 2/19 (CTL2) SCHEMATIC DIAGRAM



2—13

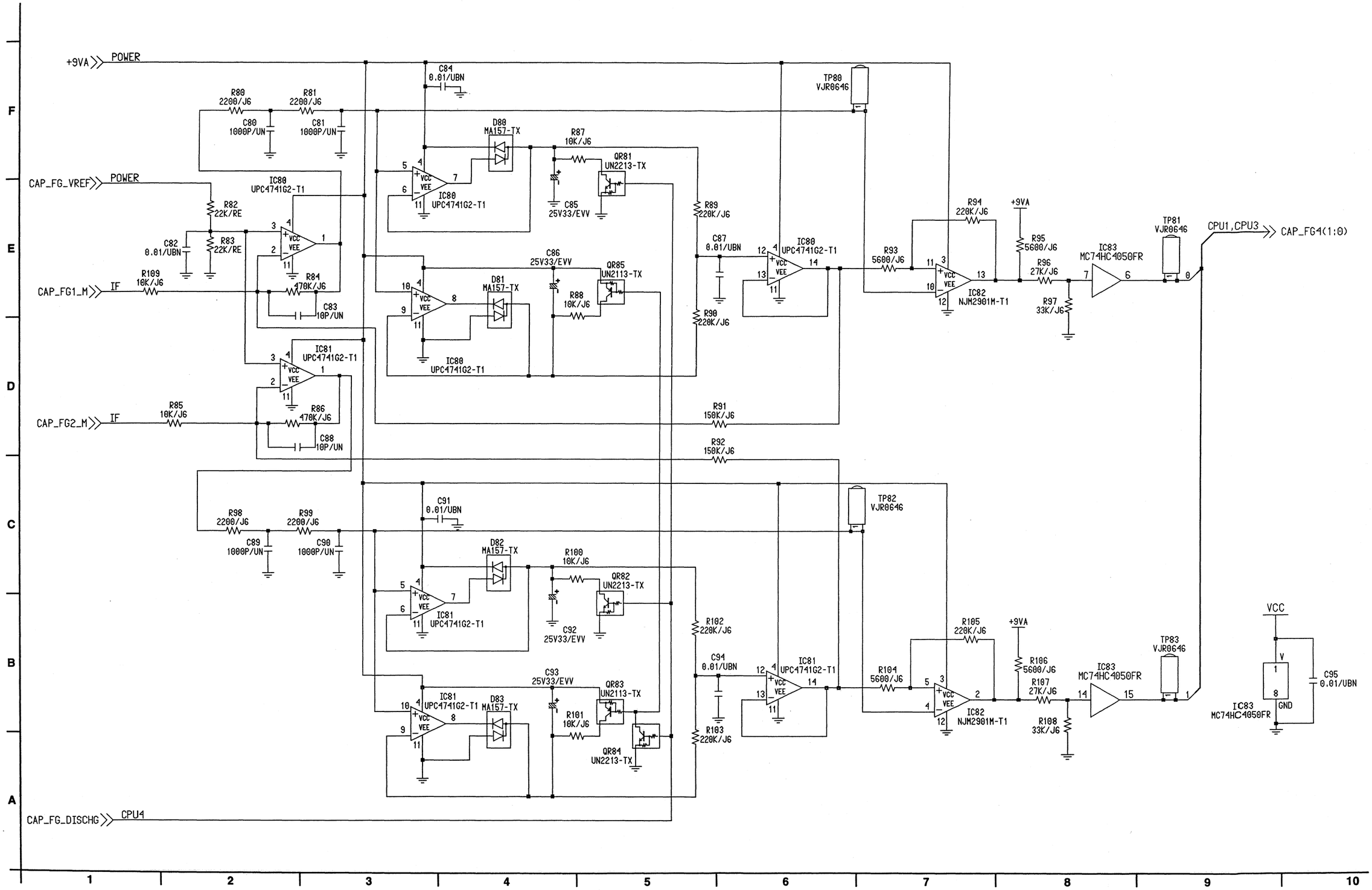
F1 SERVO 3/19 (CTL3) SCHEMATIC DIAGRAM



REVERSE SIDE
F1 SERVO 2/19

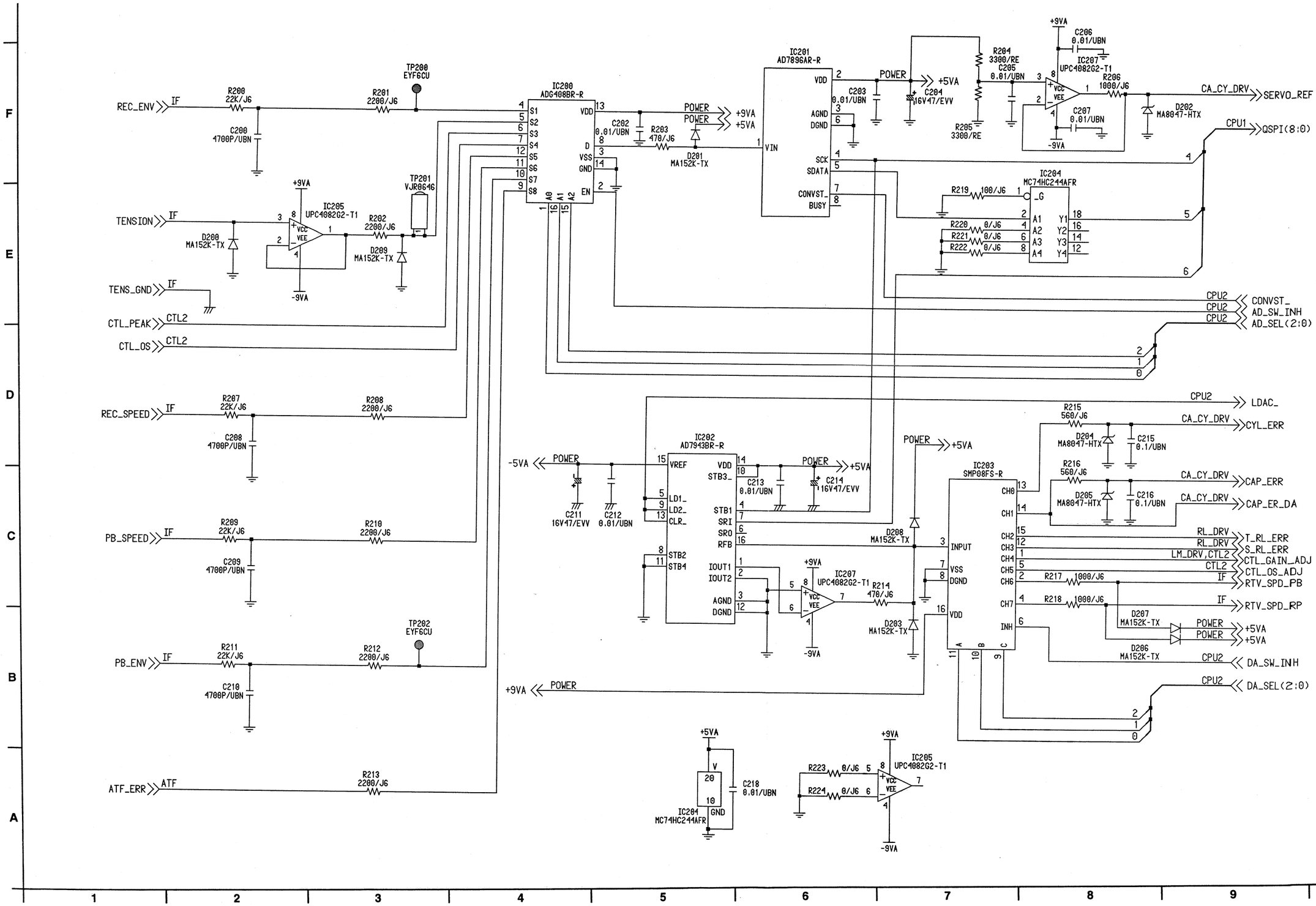
2—14

F1 SERVO 4/19 (CAP FG) SCHEMATIC DIAGRAM



2—15

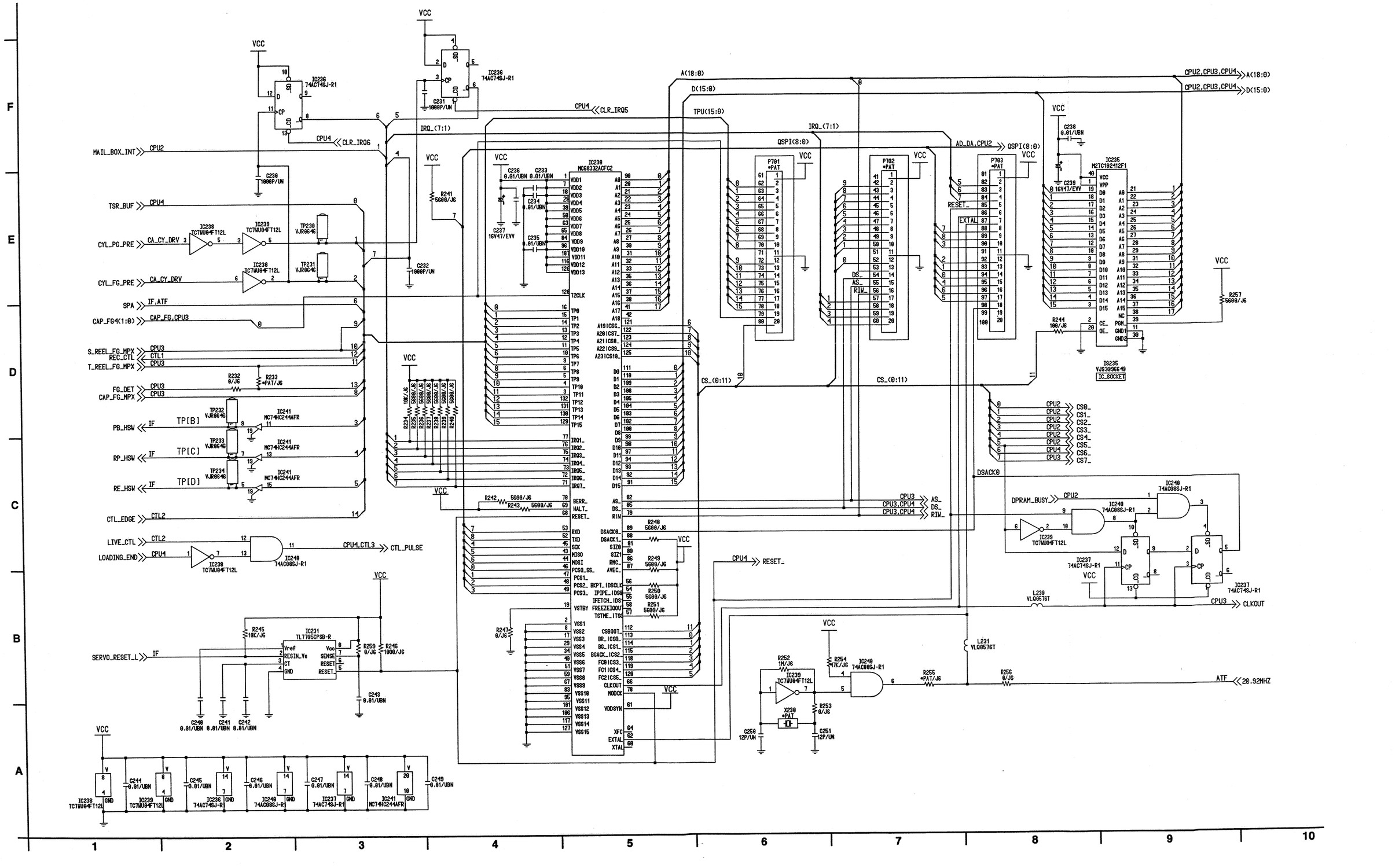
F1 SERVO 7/19 (AD DA) SCHEMATIC DIAGRAM



REVERSE SIDE
F1 SERVO 6/19

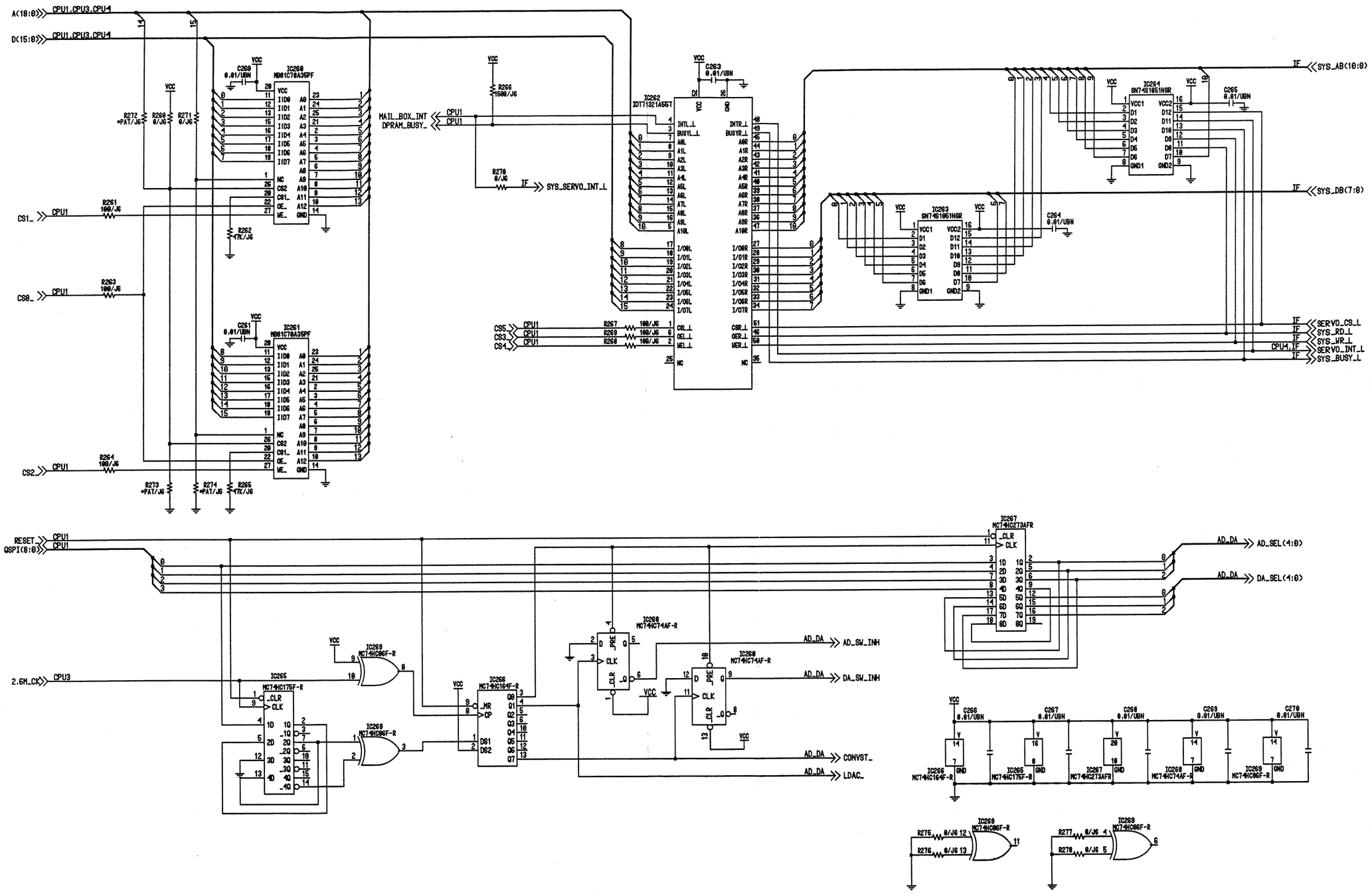
2—18

F1 SERVO 8/19 (CPU1) SCHEMATIC DIAGRAM



2—19

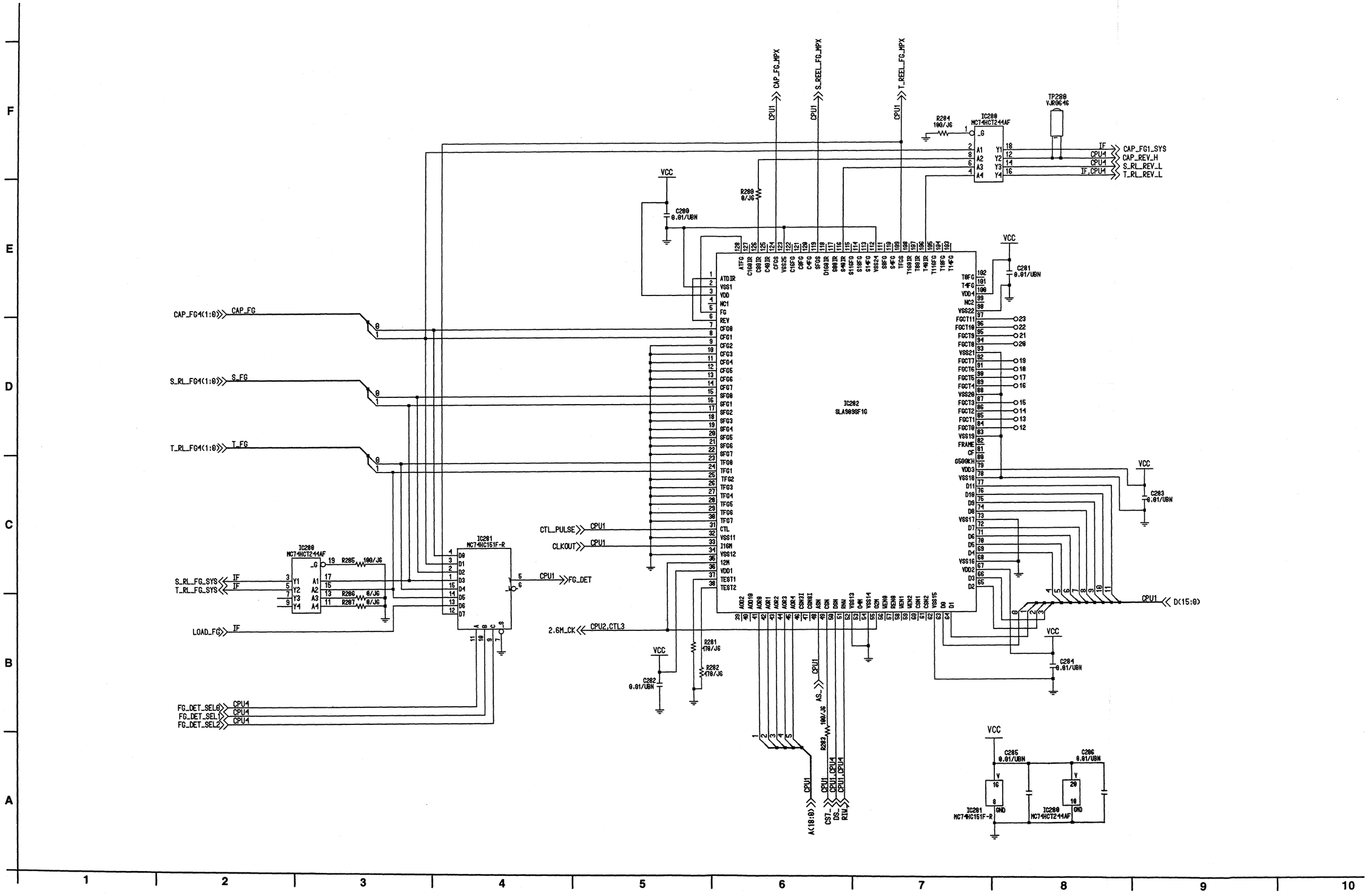
F1 SERVO 9/19 (CPU2) SCHEMATIC DIAGRAM



REVERSE SIDE
F1 SERVO 8/19

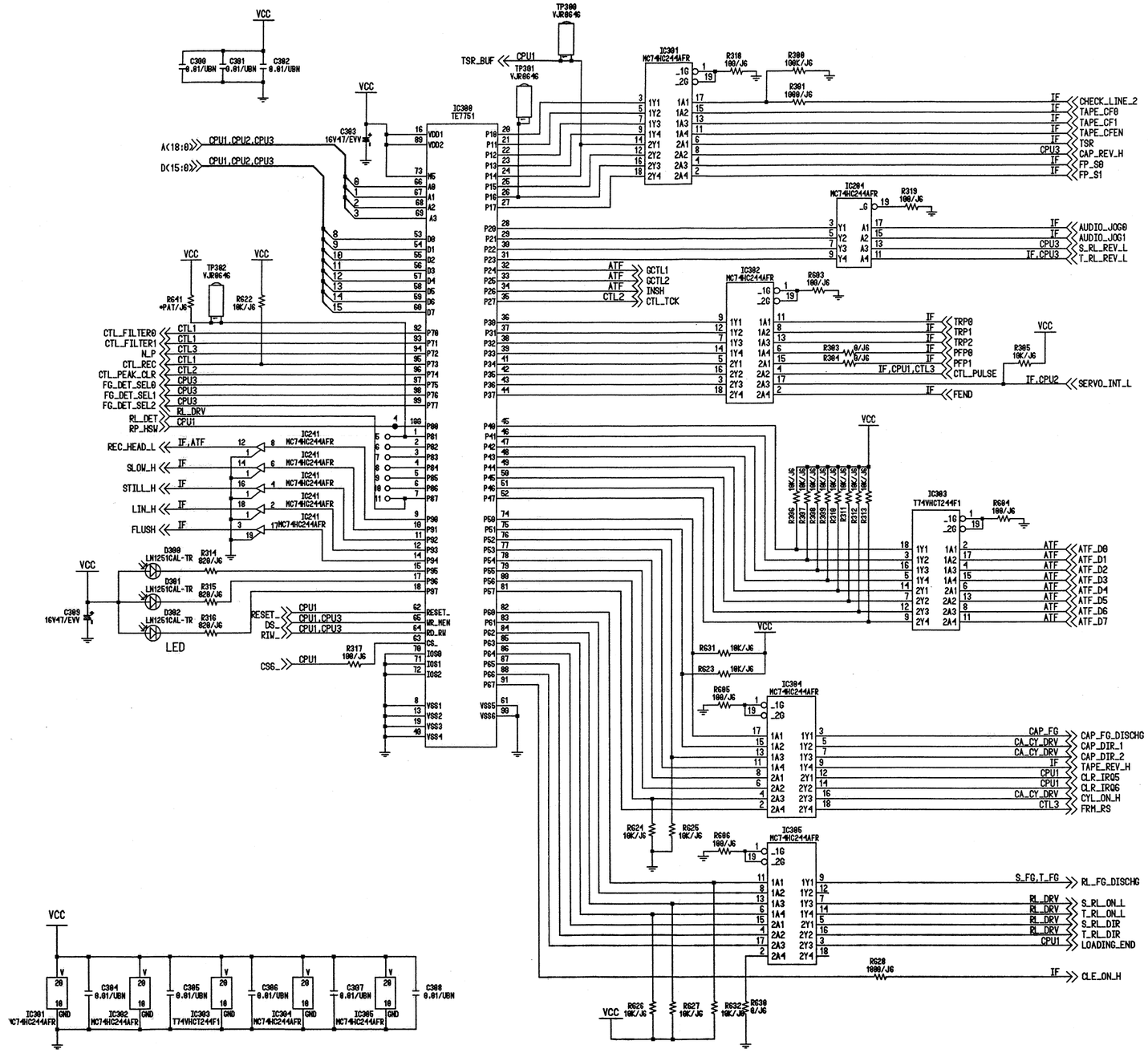
2—20

F1 SERVO 10/19 (CPU3) SCHEMATIC DIAGRAM



2—21

F1 SERVO 11/19 (CPU4) SCHEMATIC DIAGRAM

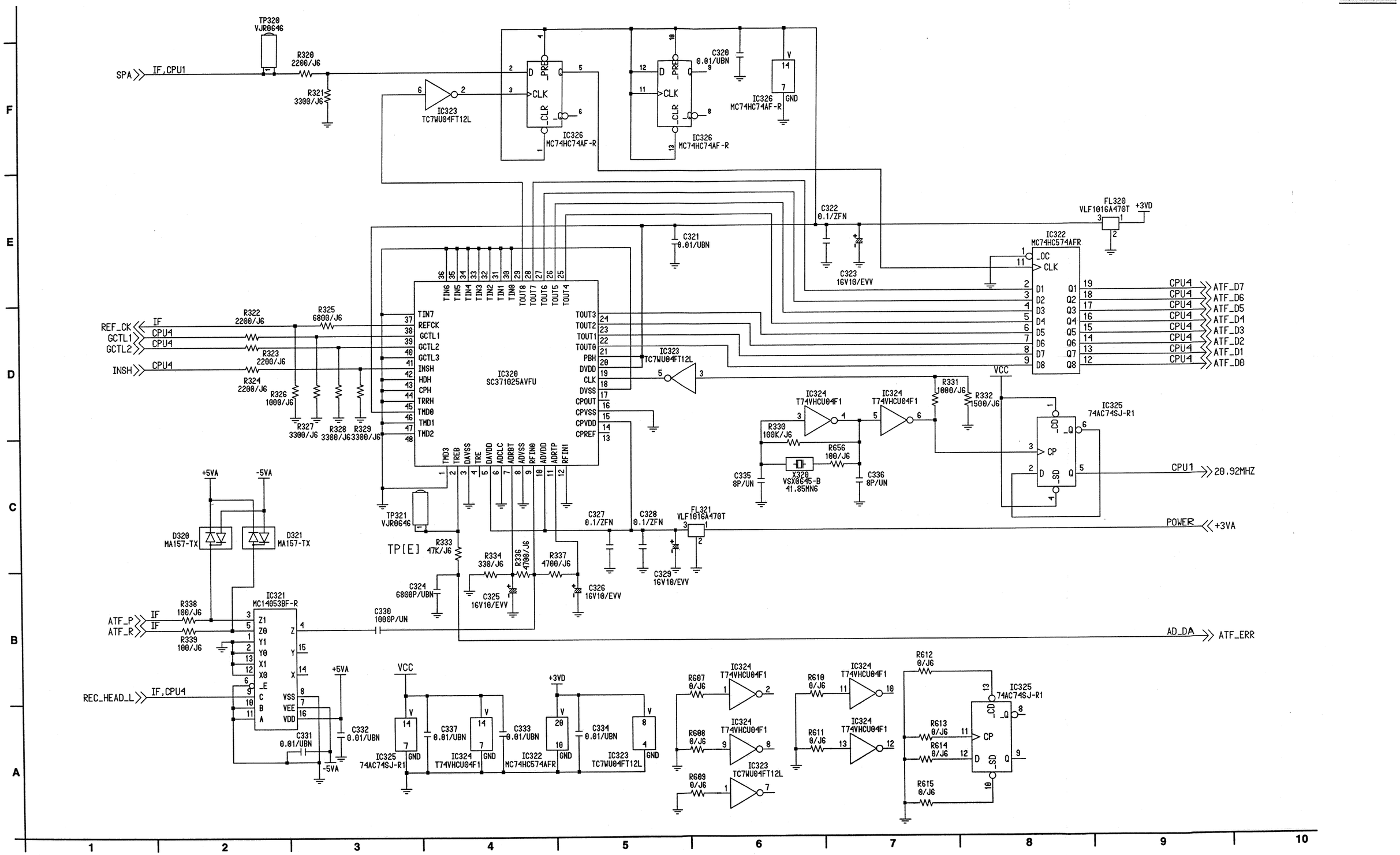


REVERSE SIDE

F1 SERVO 10/19

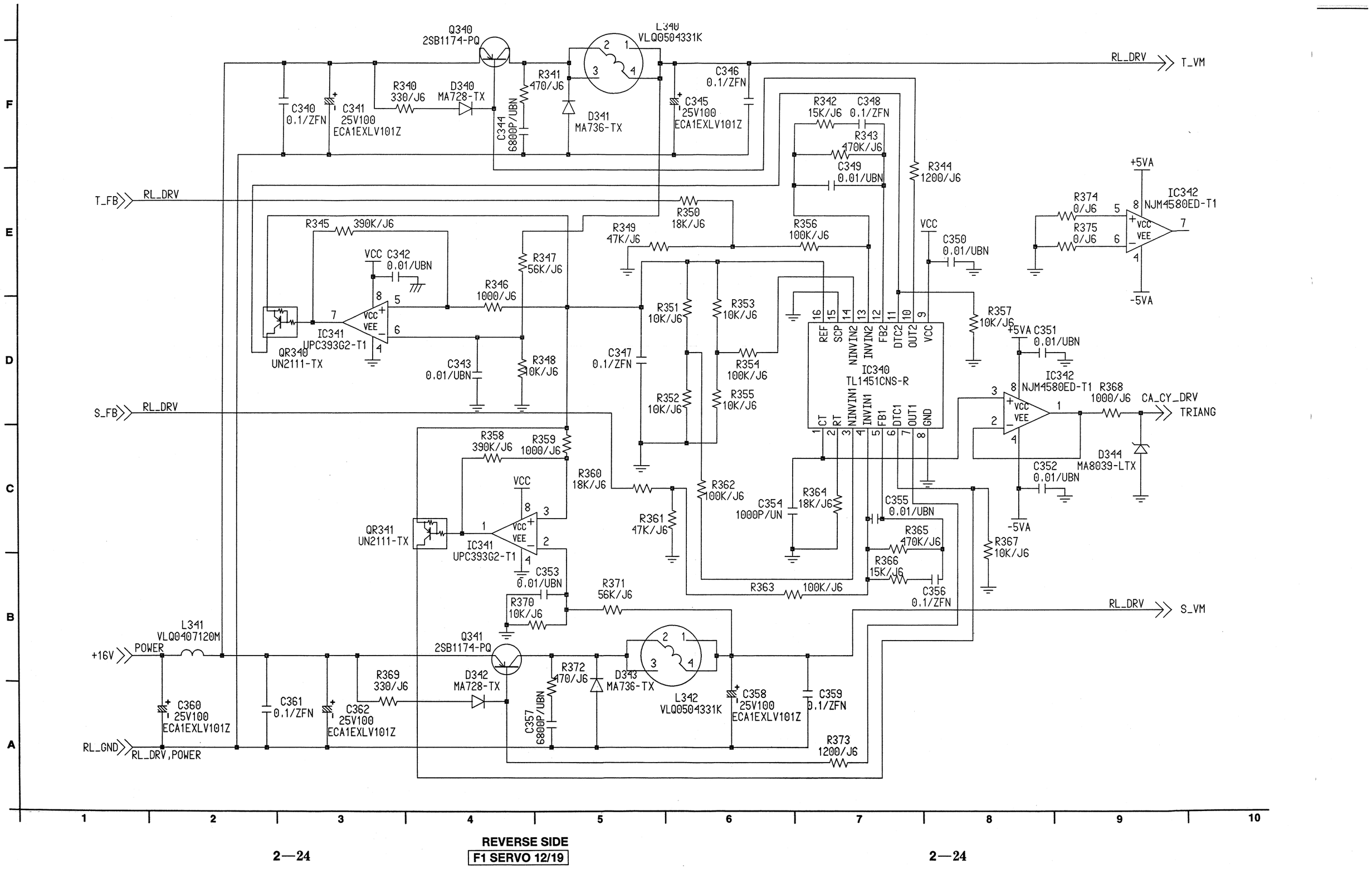
2—22

F1 SERVO 12/19 (ATF) SCHEMATIC DIAGRAM



2—23

F1 SERVO 13/19 (SW1) SCHEMATIC DIAGRAM

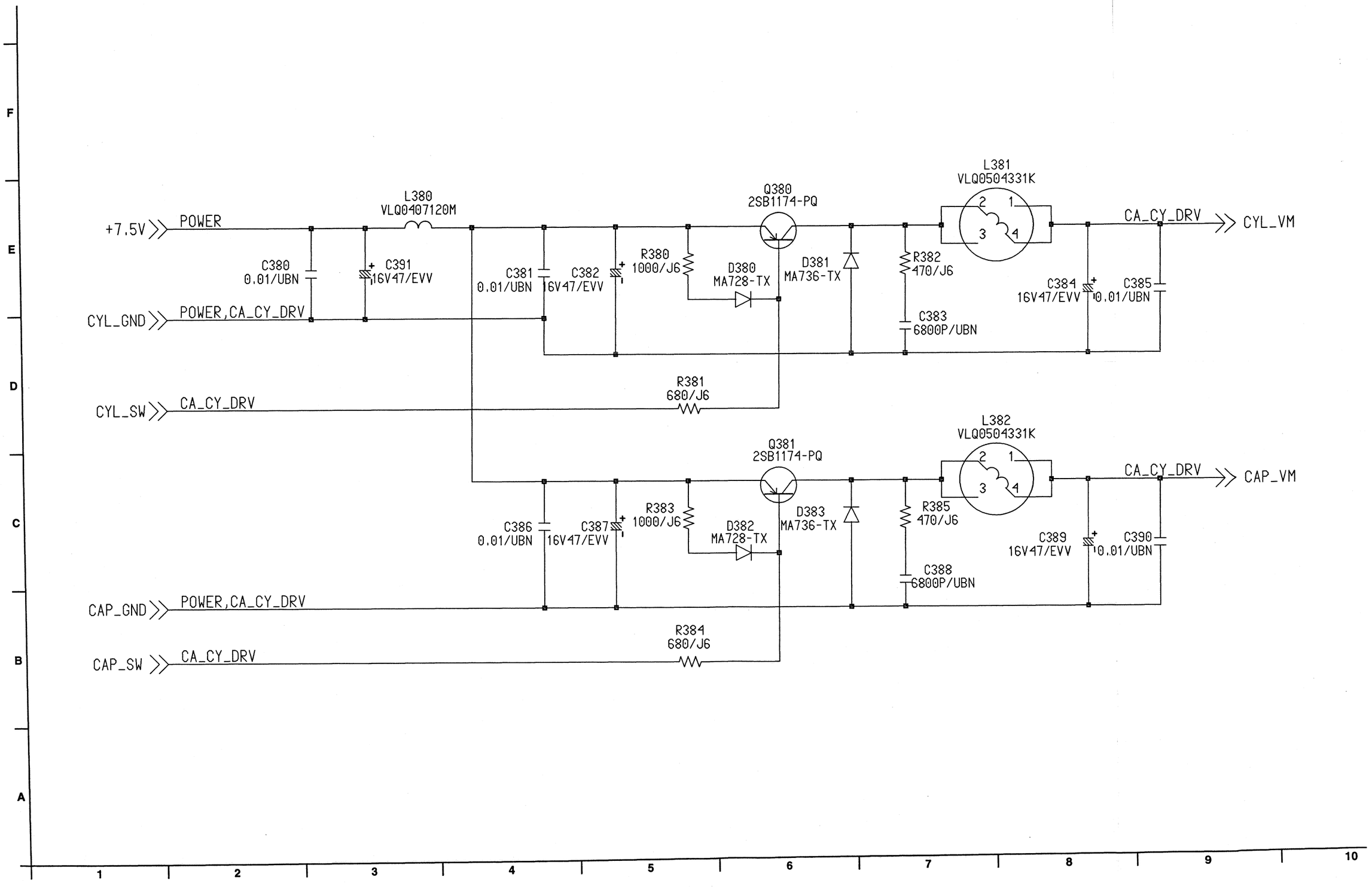


REVERSE SIDE

F1 SERVO 12/19

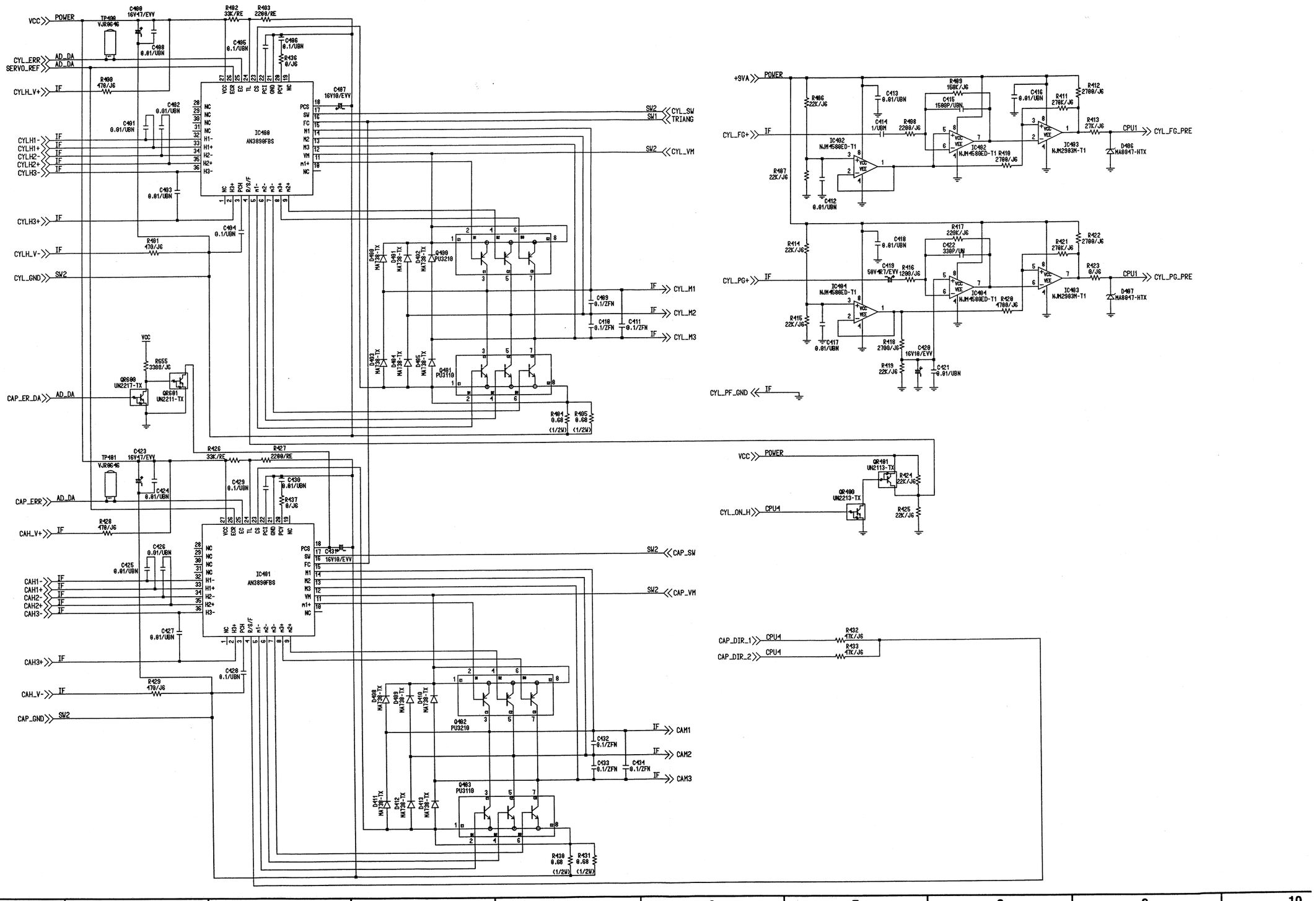
2—24

F1 SERVO 14/19 (SW2) SCHEMATIC DIAGRAM



2—25

F1 SERVO 15/19 (CA CY DRV) SCHEMATIC DIAGRAM

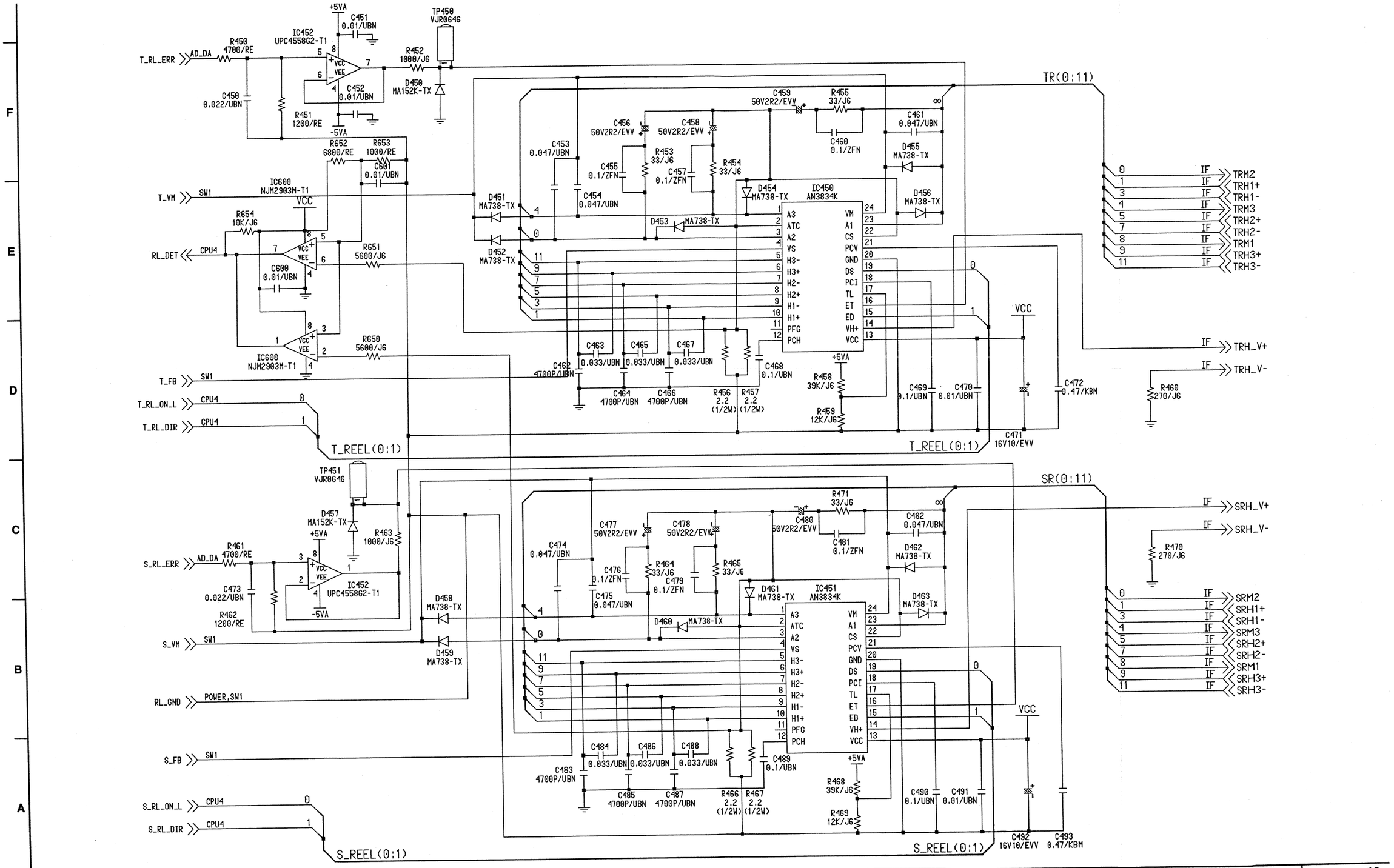


REVERSE SIDE

F1 SERVO 14/19

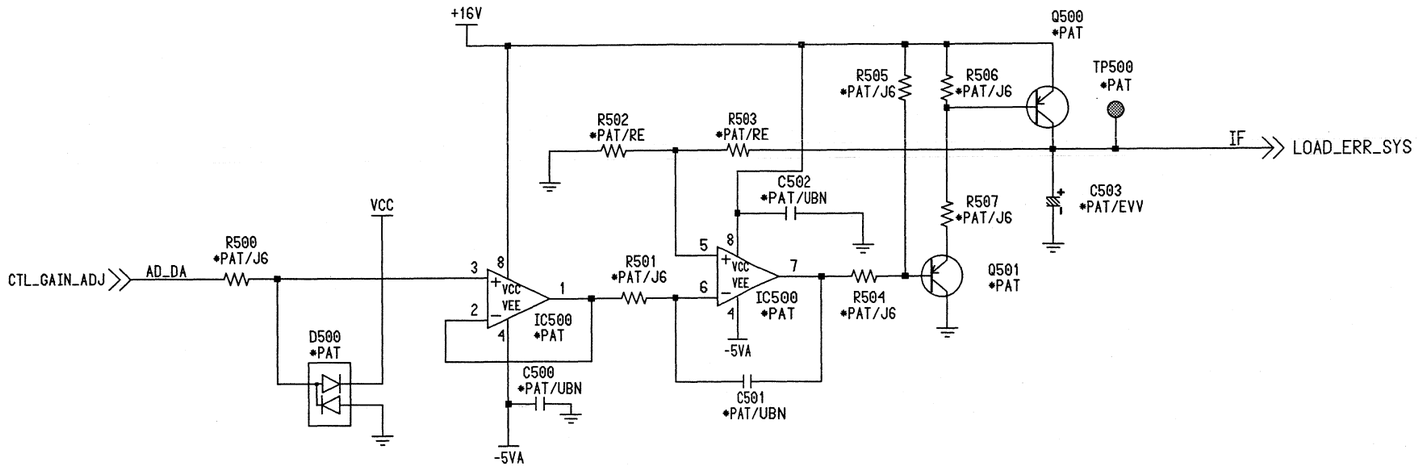
2—26

F1 SERVO 16/19 (RL DRV) SCHEMATIC DIAGRAM

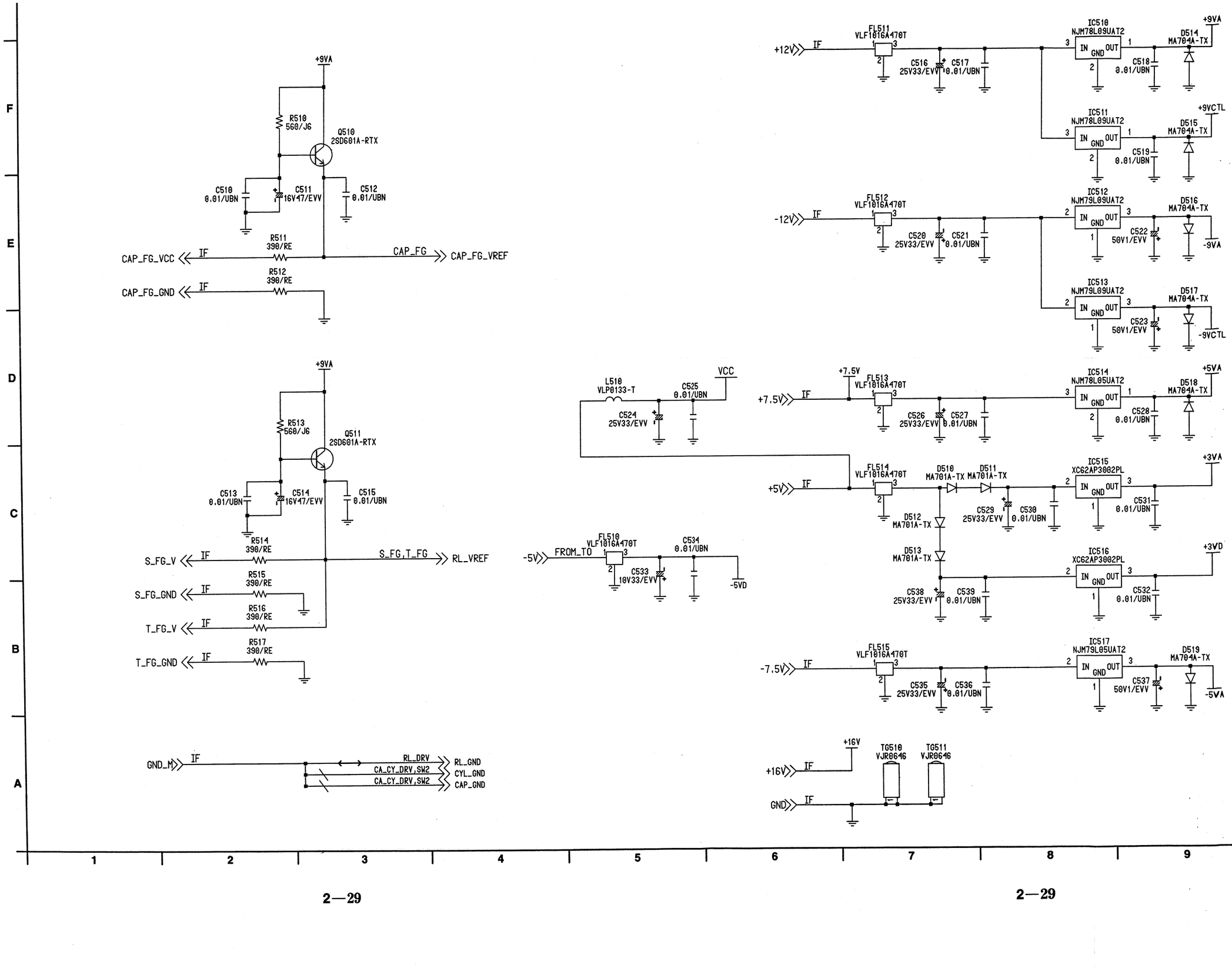


2—27

F1 SERVO 17/19 (LM DRV) SCHEMATIC DIAGRAM

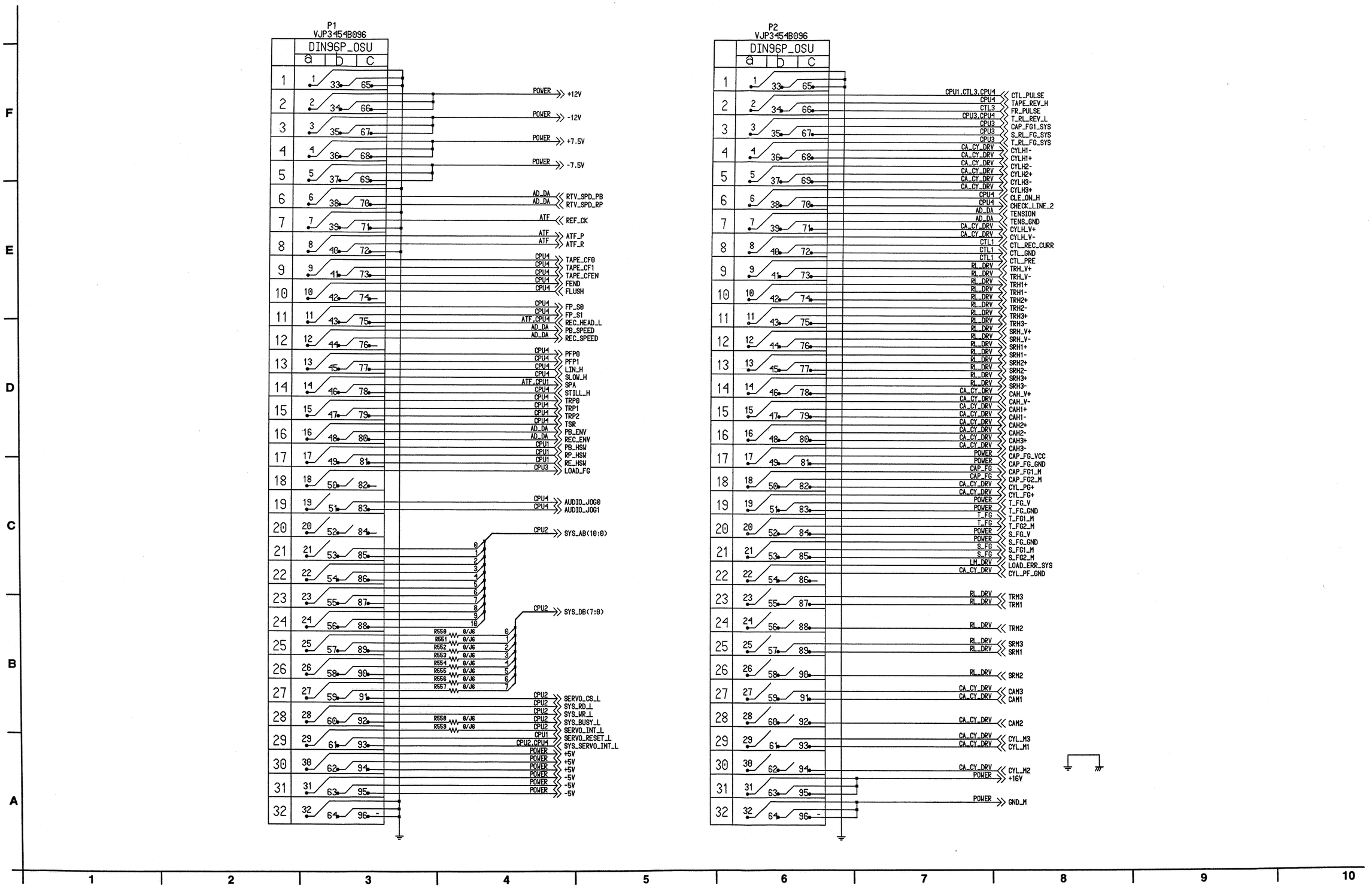


F1 SERVO 18/19 (POWER) SCHEMATIC DIAGRAM



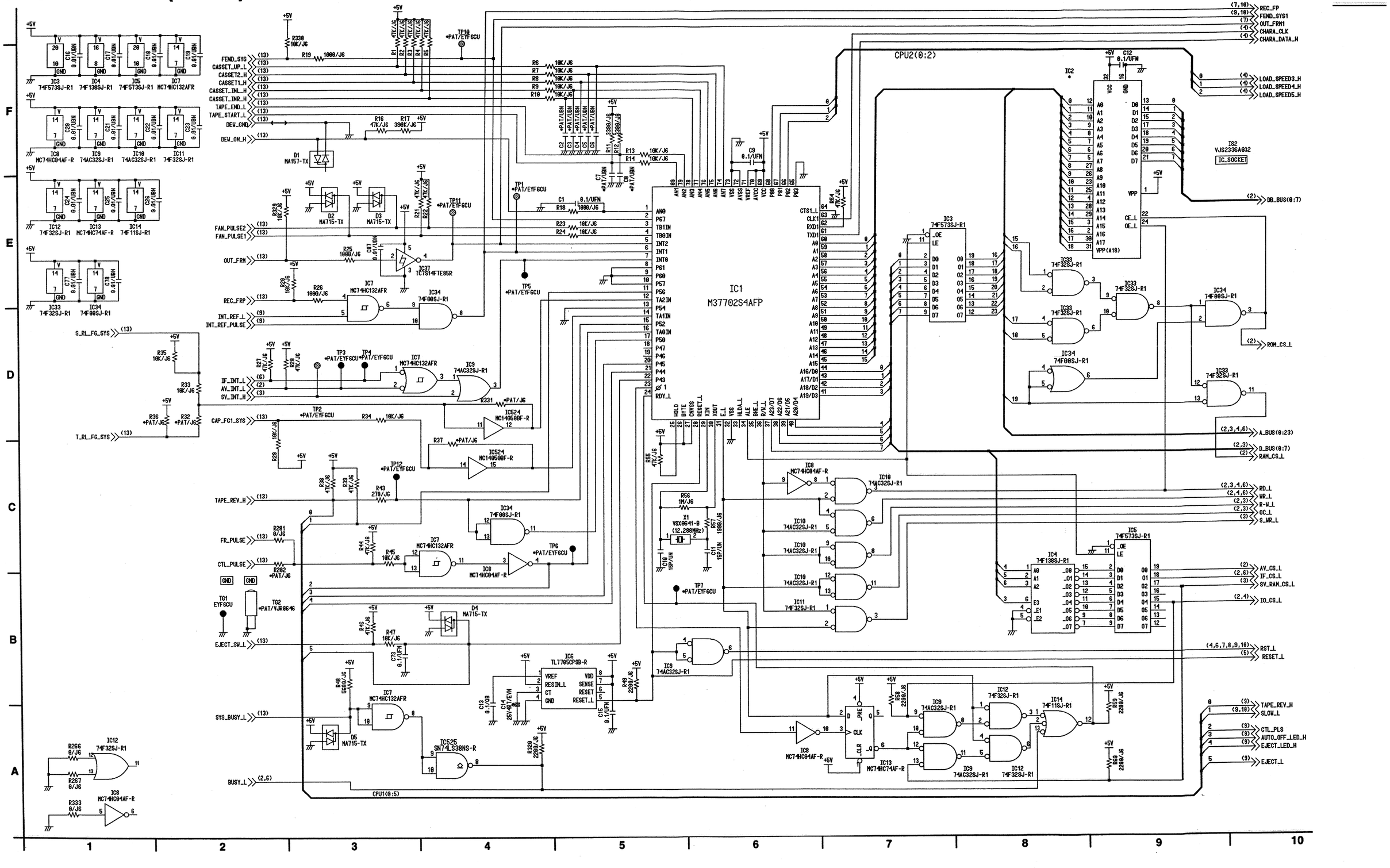
2—29

F1 SERVO 19/19 (CONNECTOR) SCHEMATIC DIAGRAM



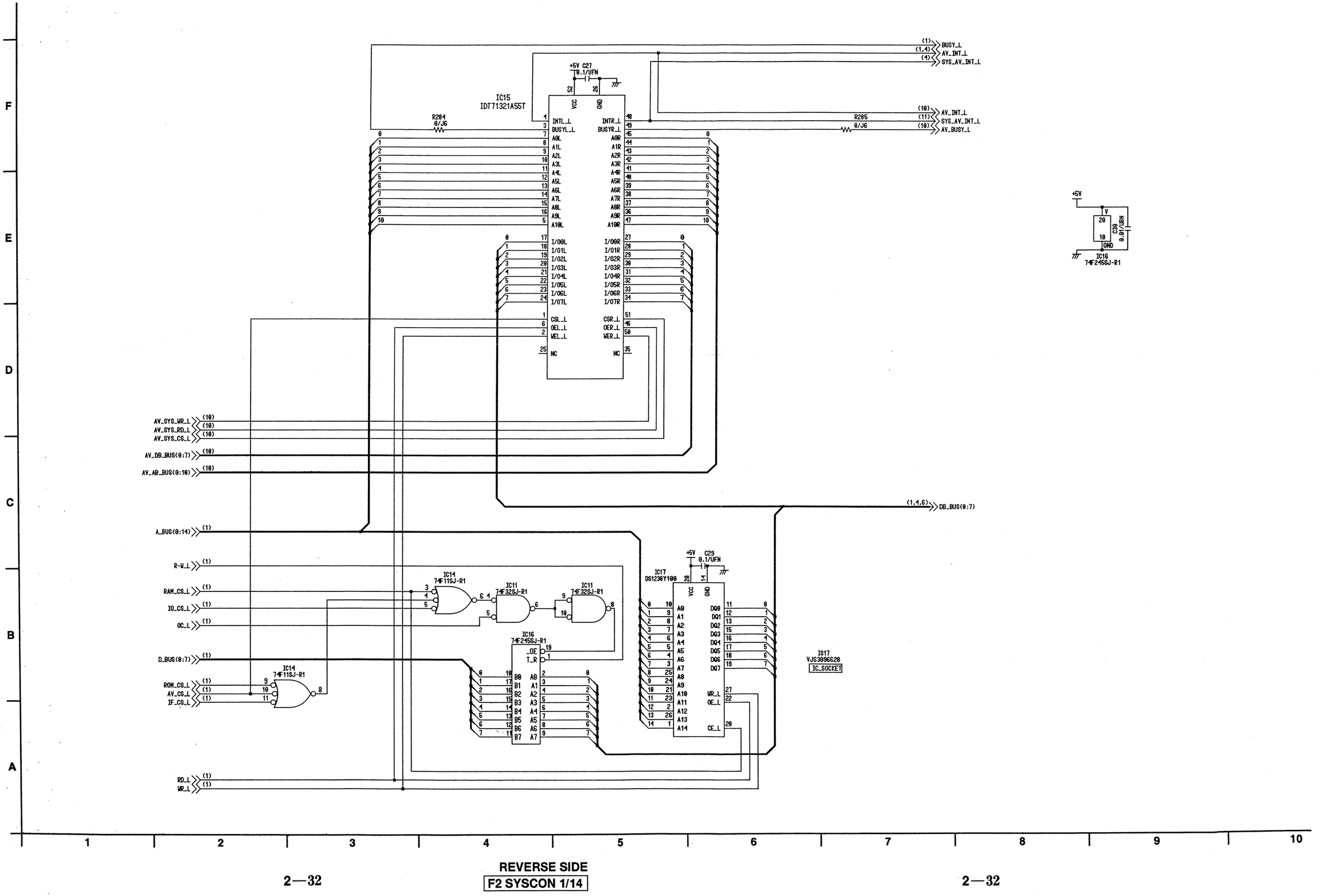
REVERSE SIDE
F1 SERVO 18/19

F2 SYSCON 1/14 (MAIN 1) SCHEMATIC DIAGRAM



2—31

F2 SYSCON 2/14 (MAIN 2) SCHEMATIC DIAGRAM

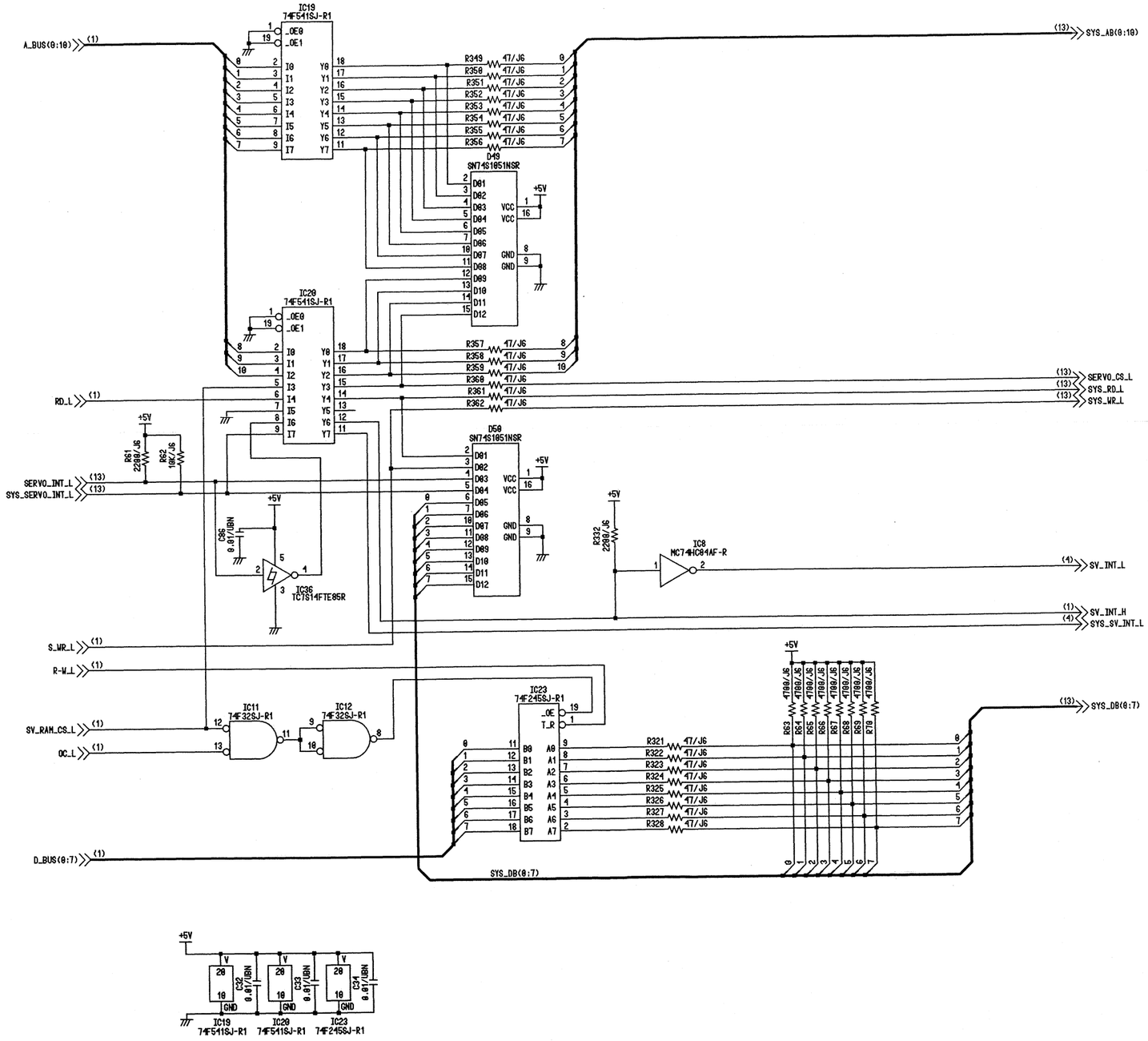


REVERSE SIDE

F2 SYSCON 1/14

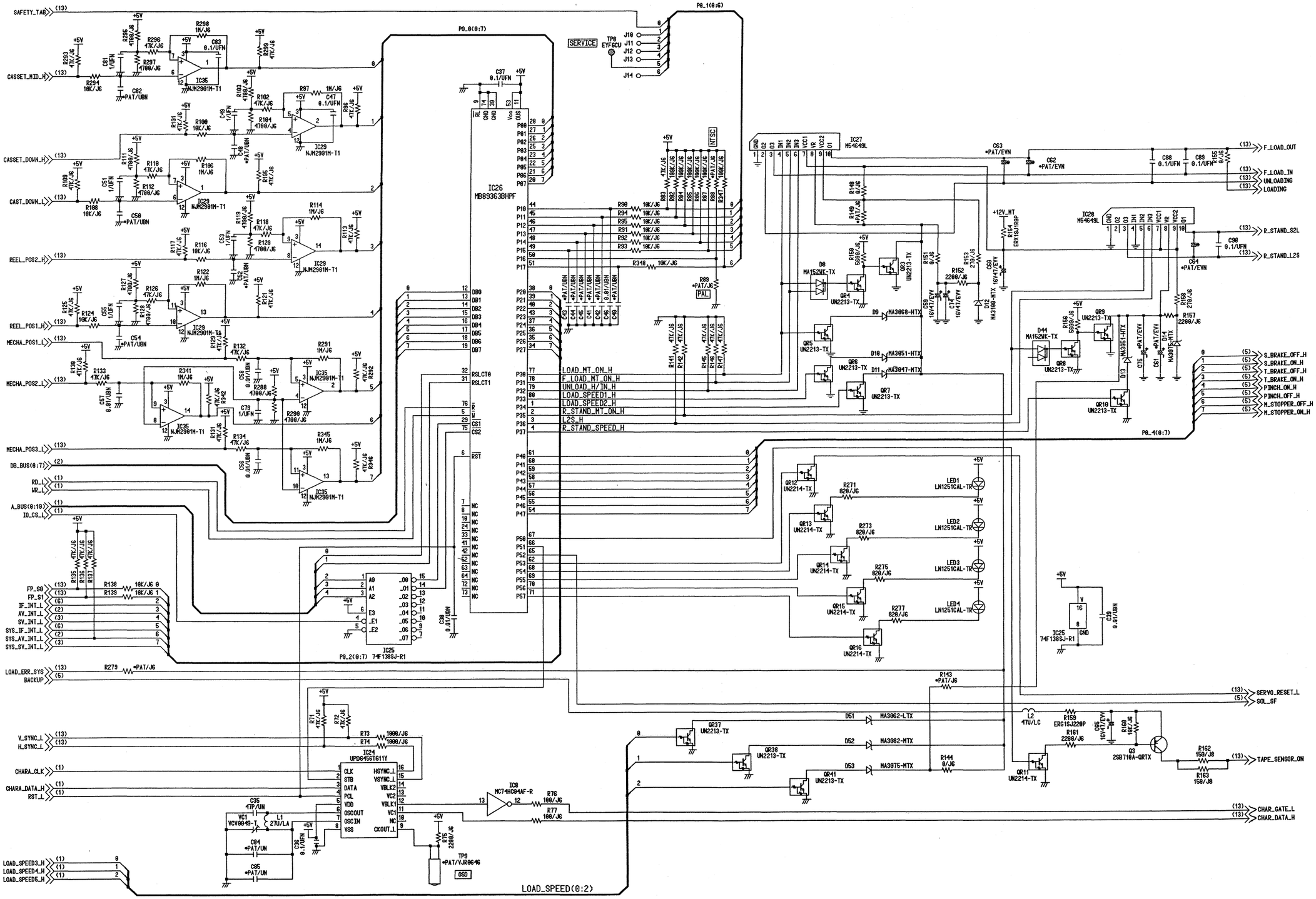
2—32

F2 SYSCON 3/14 (MAIN 3) SCHEMATIC DIAGRAM



2—33

F2 SYSCON 4/14 (MAIN 4) SCHEMATIC DIAGRAM

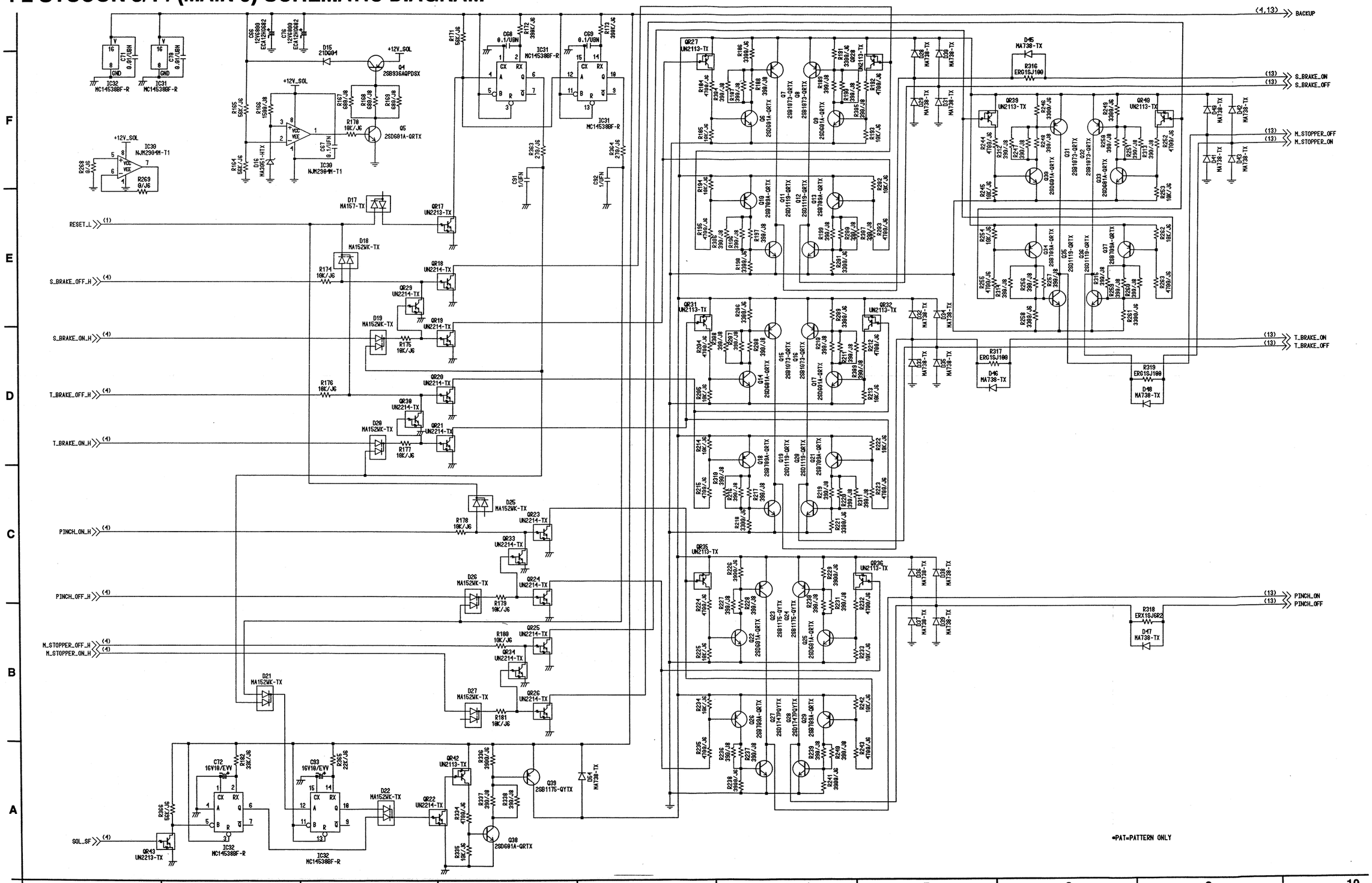


REVERSE SIDE

F2 SYSCON 3/14

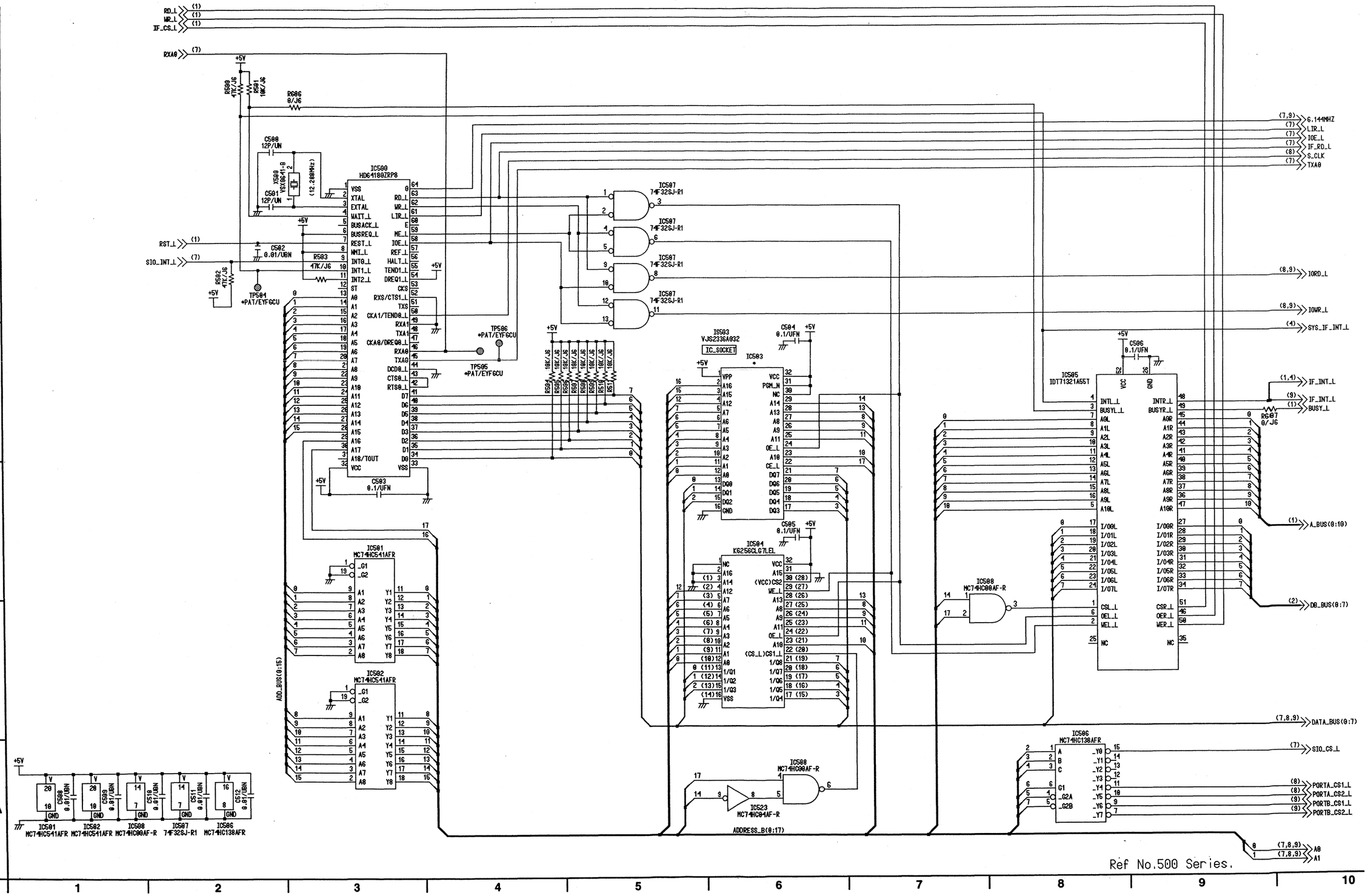
2—34

F2 SYSCON 5/14 (MAIN 5) SCHEMATIC DIAGRAM



2—35

F2 SYSCON 6/14 (I/F 1) SCHEMATIC DIAGRAM

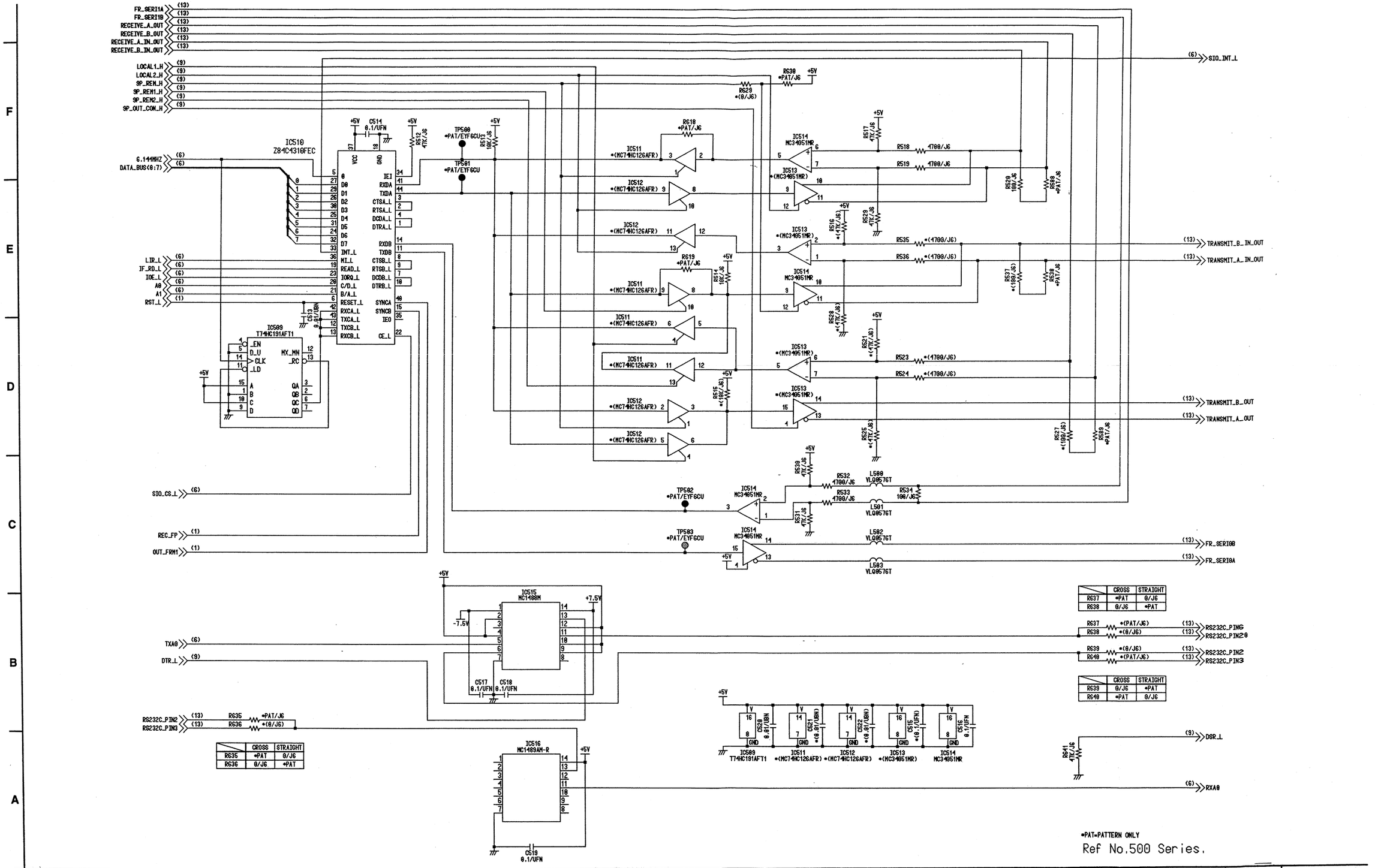


REVERSE SIDE

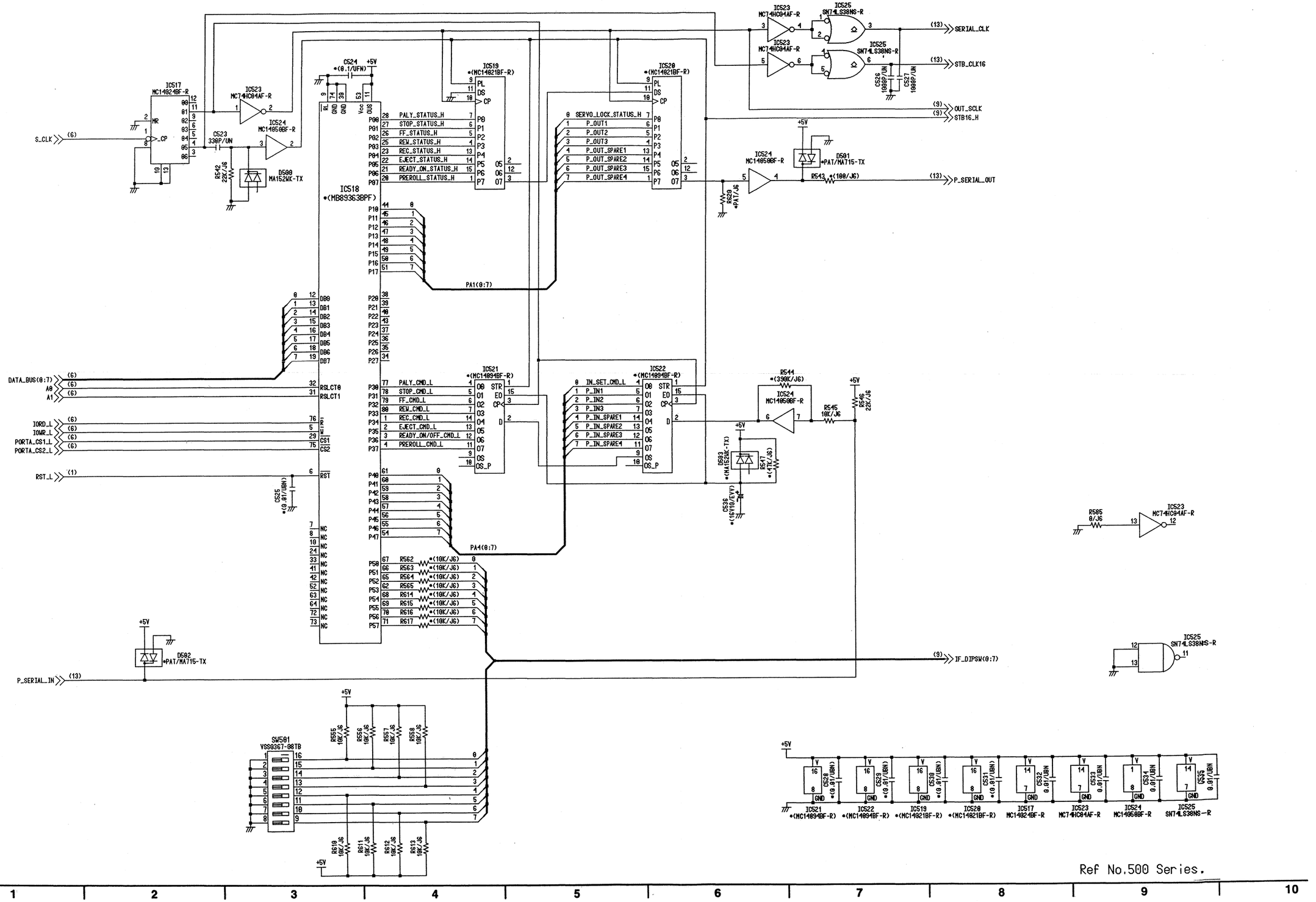
F2 SYSCON 5/14

2—36

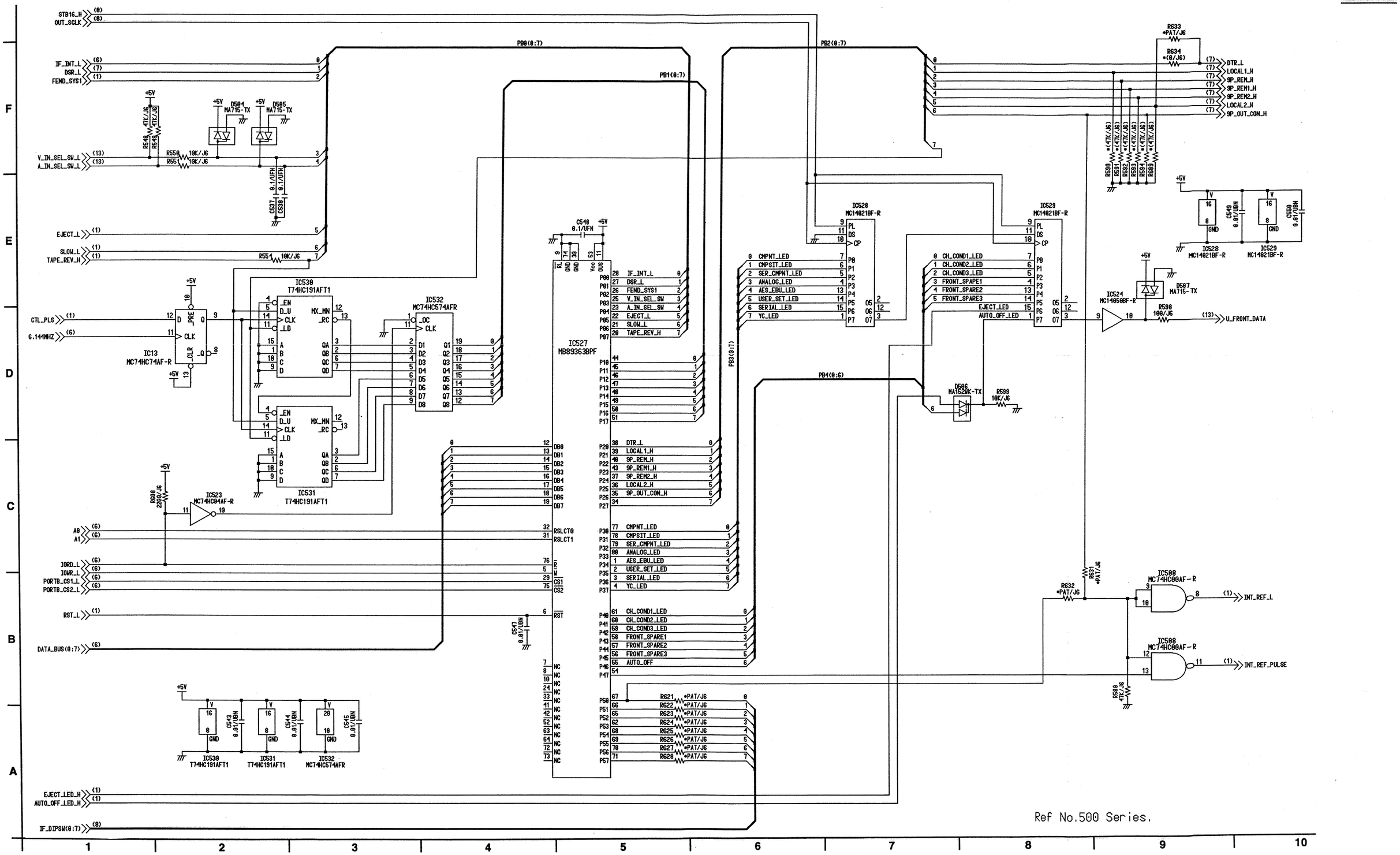
F2 SYSCON 7/14 (I/F 2) SCHEMATIC DIAGRAM


IC510 Z84C4310FEC
IC509 T74HC191AFT1
IC511 *(MC74HC126AFR)
IC512 *(MC74HC126AFR)
IC513 *(MC3486IMR)
IC514 MC3486IMR
IC515 MC1488M
IC516 MC1489AM-R
L500 VL0957GT
L501 VL0957GT
L502 VL0957GT
L503 VL0957GT
TP500 *PAT/EYF6CU
TP501 *PAT/EYF6CU
TP502 *PAT/EYF6CU
TP503 *PAT/EYF6CU
FR_SERI1A
FR_SERI1B
RECEIVE_A_OUT
RECEIVE_B_OUT
RECEIVE_A_IN_OUT
RECEIVE_B_IN_OUT
LOCAL1_H
LOCAL2_H
SP_REM_H
SP_REM1_H
SP_REM2_H
SP_OUT_CON_H
6.144MHZ
DATA_BUS(0:7)
LIR_L
IF_RD_L
IOE_L
A0
A1
RST_L
SIO_CS_L
REC_FP
OUT_FRM1
TXA0
DTR_L
SIO_INT_L
TRANSMIT_B_IN_OUT
TRANSMIT_A_IN_OUT
TRANSMIT_B_OUT
TRANSMIT_A_OUT
FR_SERI0B
FR_SERI0A
RS232C_PIN2
RS232C_PIN3
RS232C_PIN6
RS232C_PIN20
RS232C_PIN2
RS232C_PIN3
DSR_L
RXA0
+5V
+7.5V
-7.5V
C514 0.1/UFN
C515 0.1/UFN
C516 0.1/UFN
C517 0.1/UFN
C518 0.1/UFN
C519 0.1/UFN
C520 0.01/UBN
C521 *(0.01/UBN)
C522 *(0.01/UBN)
R638 *PAT/J6
R629 *(0/J6)
R618 *PAT/J6
R619 *PAT/J6
R635 *PAT/J6
R636 *(0/J6)
R637 *(PAT/J6)
R638 *(0/J6)
R639 *(0/J6)
R640 *(PAT/J6)
R532 1700/J6
R533 1700/J6
R534 100/J6
R535 *(1700/J6)
R536 *(1700/J6)
R523 *(1700/J6)
R524 *(1700/J6)
R518 1700/J6
R519 1700/J6
R641 47K/J6
R642 47K/J6
R643 47K/J6
R644 47K/J6
R645 47K/J6
R646 47K/J6
R647 47K/J6
R648 47K/J6
R649 47K/J6
R650 47K/J6
R651 47K/J6
R652 47K/J6
R653 47K/J6
R654 47K/J6
R655 47K/J6
R656 47K/J6
R657 47K/J6
R658 47K/J6
R659 47K/J6
R660 47K/J6

F2 SYSCON 8/14 (I/F 3) SCHEMATIC DIAGRAM

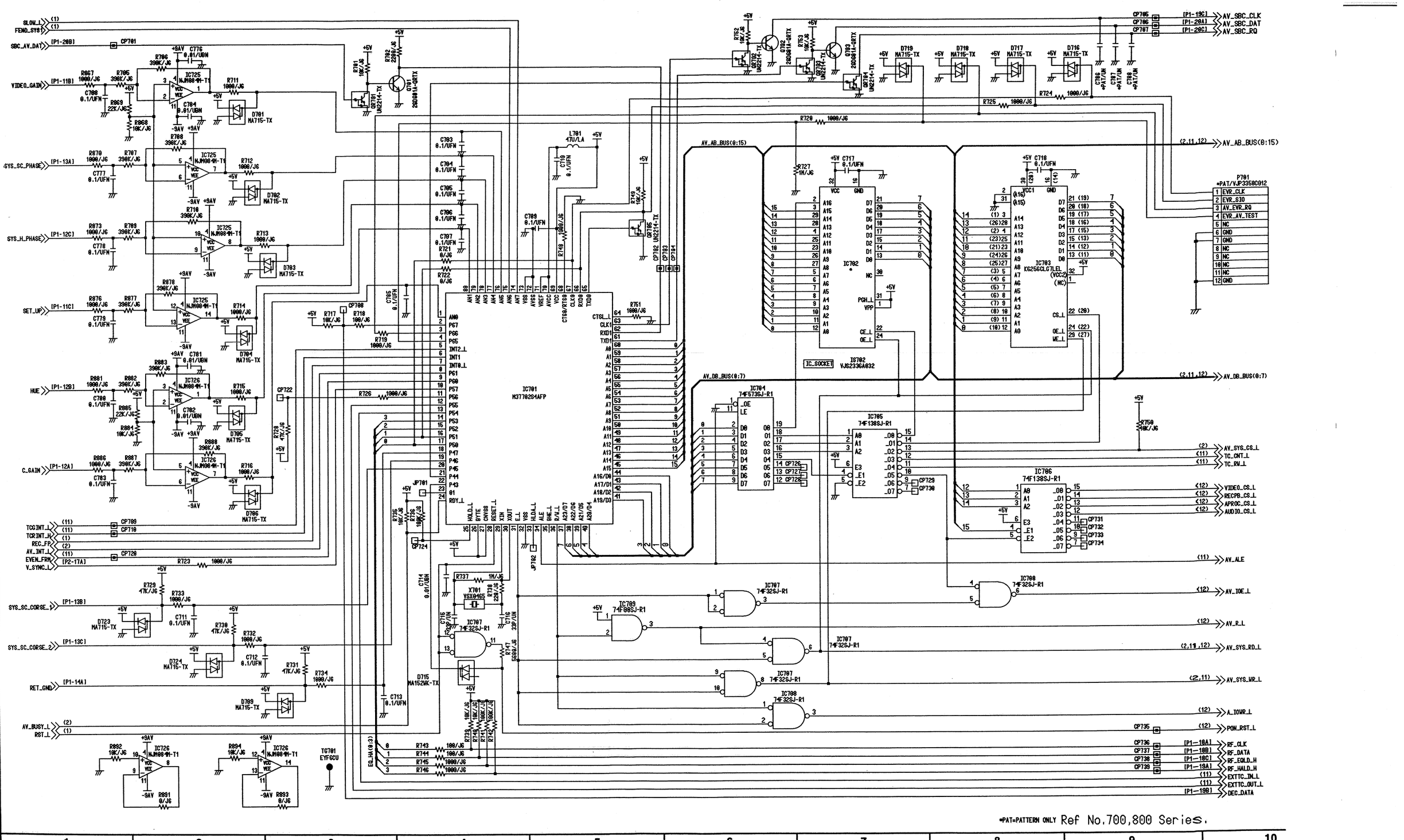


F2 SYSCON 9/14 (I/F 4) SCHEMATIC DIAGRAM

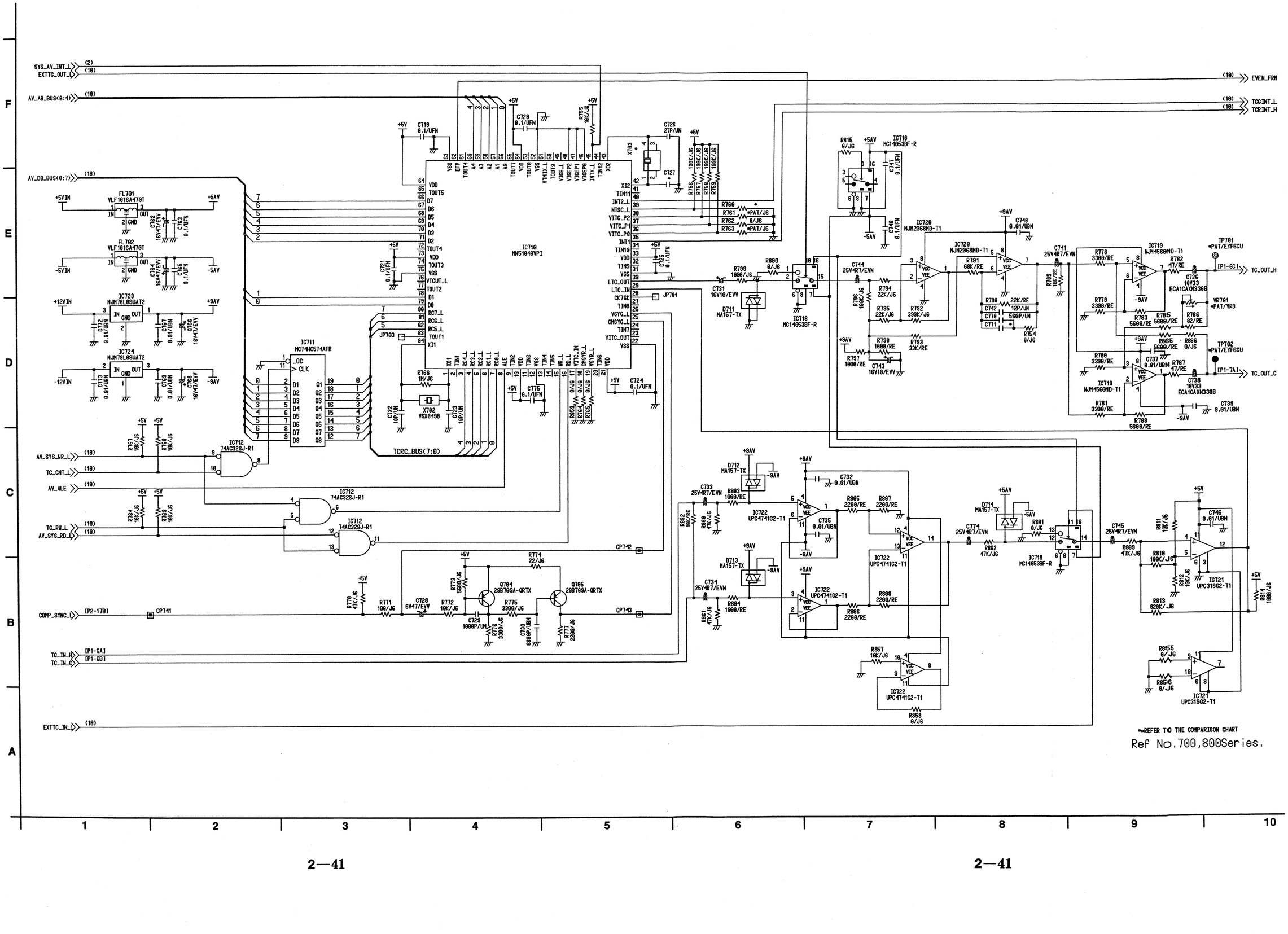


2—39

F2 SYSCON 10/14 (AV I/F 1) SCHEMATIC DIAGRAM

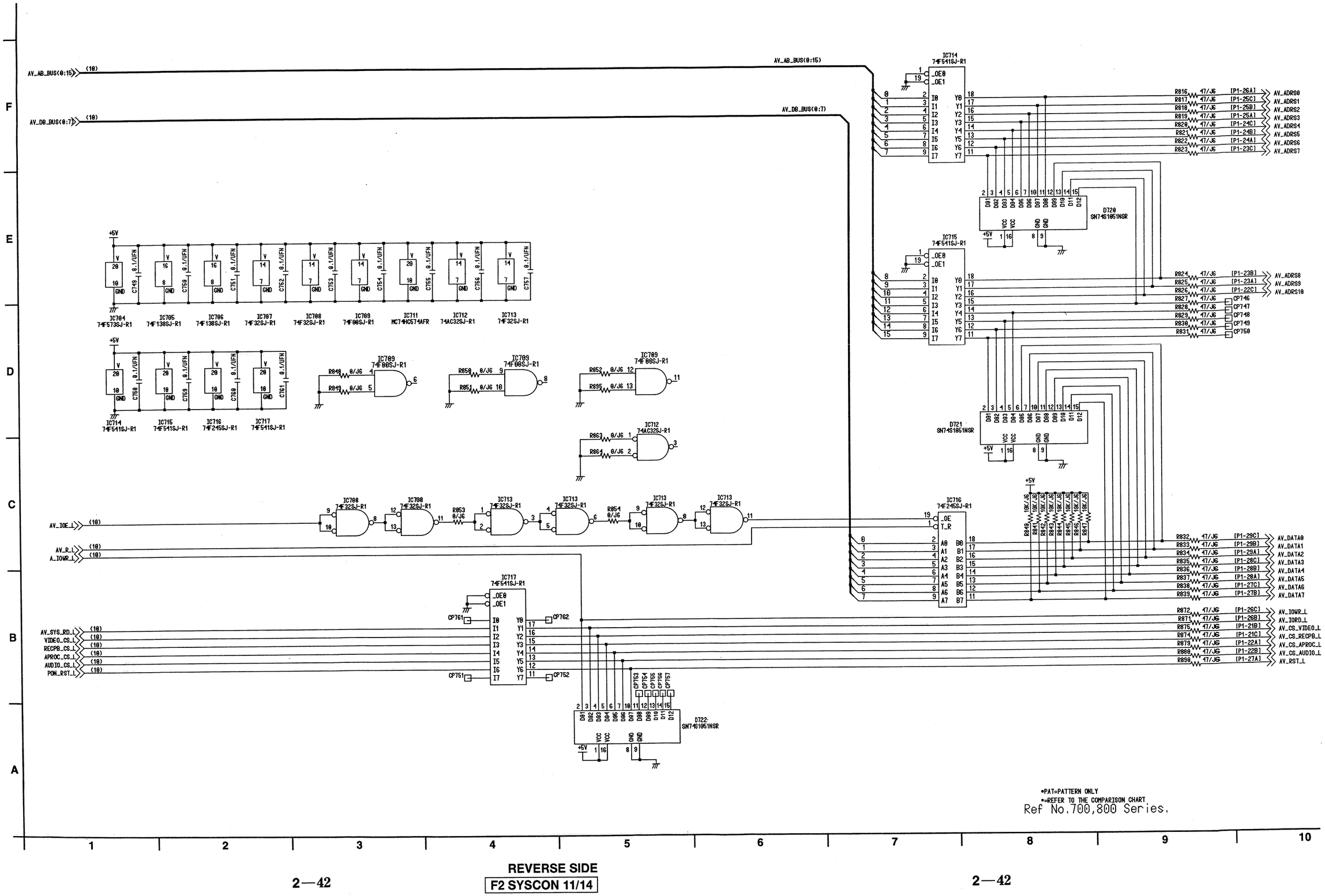


F2 SYSCON 11/14 (AV I/F 2) SCHEMATIC DIAGRAM



2—41

F2 SYSCON 12/14 (AV I/F 3) SCHEMATIC DIAGRAM

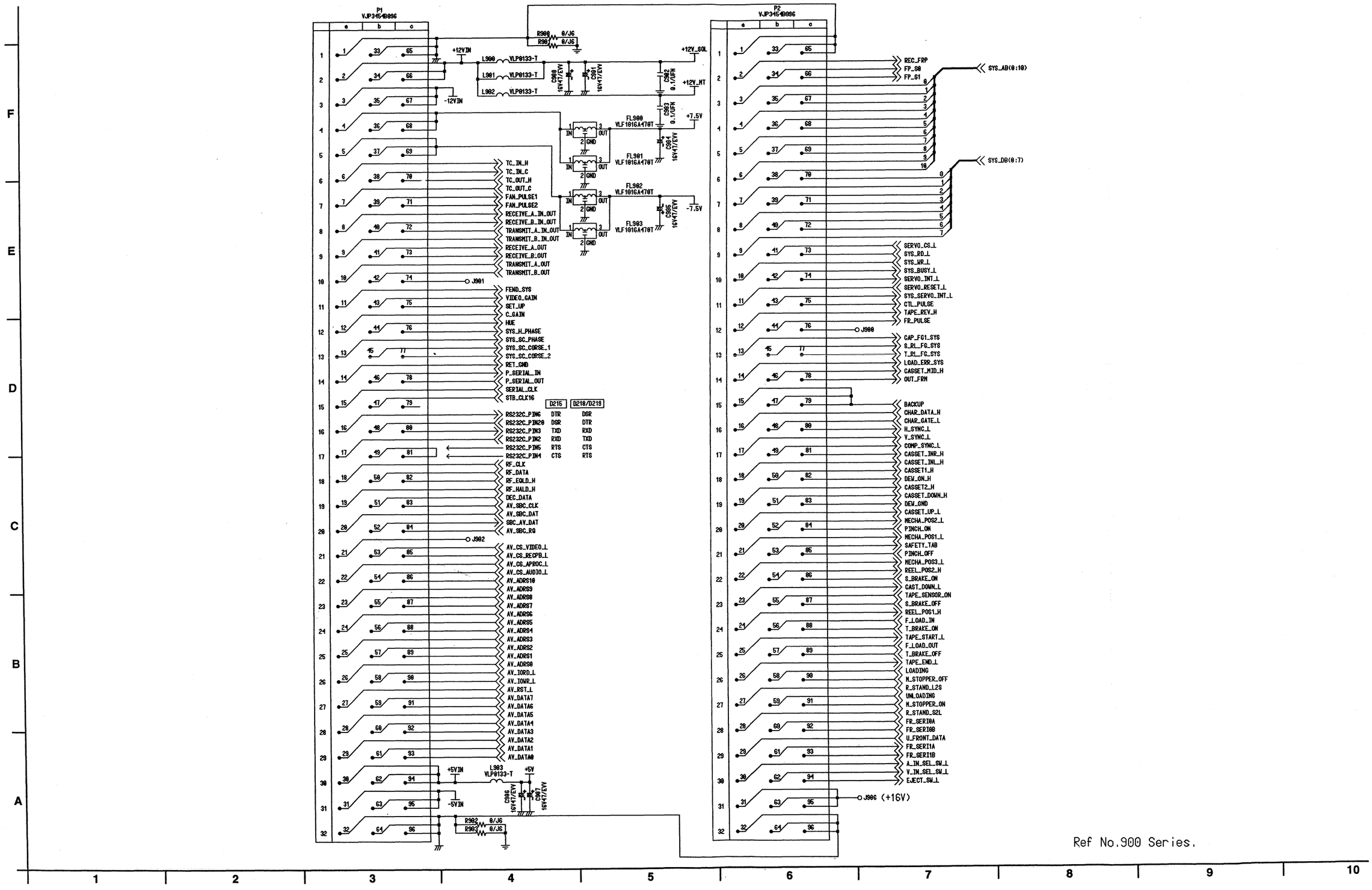


REVERSE SIDE

F2 SYSCON 11/14

2—42

F2 SYSCON 13/14 (CONNECTOR) SCHEMATIC DIAGRAM



2—43

F2 SYSCON 14/14 (COMPARISON CHART) SCHEMATIC DIAGRAM

REF	NTSC	PAL
C2	*PAT/UBN	*PAT/UBN
C3	*PAT/UBN	*PAT/UBN
C4	*PAT/UBN	*PAT/UBN
C40	*PAT/UBN	*PAT/UBN
C41	*PAT/UBN	*PAT/UBN
C42	*PAT/UBN	*PAT/UBN
C43	*PAT/UBN	*PAT/UBN
C44	*PAT/UBN	*PAT/UBN
C45	*PAT/UBN	*PAT/UBN
C48	*PAT/UBN	*PAT/UBN
C5	*PAT/UBN	*PAT/UBN
C50	*PAT/UBN	*PAT/UBN
C515	*PAT/UFN	*PAT/UFN
C52	*PAT/UBN	*PAT/UBN
C521	*PAT/UBN	*PAT/UBN
C522	*PAT/UBN	*PAT/UBN
C524	*PAT/UFN	*PAT/UFN
C525	*PAT/UBN	*PAT/UBN
C528	*PAT/UBN	*PAT/UBN
C529	*PAT/UBN	*PAT/UBN
C530	*PAT/UBN	*PAT/UBN
C531	*PAT/UBN	*PAT/UBN
C536	*PAT/EVV	*PAT/EVV
C54	*PAT/UBN	*PAT/UBN
C6	*PAT/UBN	*PAT/UBN
C61	*PAT/EVV	*PAT/EVV
C62	*PAT/EVN	*PAT/EVN
C63	*PAT/EVN	*PAT/EVN
C64	*PAT/EVN	*PAT/EVN
C7	*PAT/UBN	*PAT/UBN
C727	18P/UN	22P/UN
C75	*PAT/EVV	*PAT/EVV
C771	120P/UN	2200P/UBN
C786	*PAT/UN	*PAT/UN
C787	*PAT/UN	*PAT/UN
C788	*PAT/UN	*PAT/UN
C8	*PAT/UBN	*PAT/UBN
C82	*PAT/UBN	*PAT/UBN
C84	*PAT/UN	*PAT/UN
C85	*PAT/UN	*PAT/UN
D501	*PAT	*PAT
D502	*PAT	*PAT
D503	*PAT	*PAT

REF	NTSC	PAL
IC2	VSI2384	VSI2397
IC503	VSI2385	VSI2398
IC511	*PAT	*PAT
IC512	*PAT	*PAT
IC513	*PAT	*PAT
IC518	*PAT	*PAT
IC519	*PAT	*PAT
IC520	*PAT	*PAT
IC521	*PAT	*PAT
IC522	*PAT	*PAT
IC702	VSI2387	VSI2399
P701	*PAT	*PAT
R143	*PAT/J6	*PAT/J6
R149	*PAT/J6	*PAT/J6
R279	*PAT/J6	*PAT/J6
R282	*PAT/J6	*PAT/J6
R32	*PAT/J6	*PAT/J6
R331	*PAT/J6	*PAT/J6
R36	*PAT/J6	*PAT/J6
R37	*PAT/J6	*PAT/J6
R515	*PAT/J6	*PAT/J6
R516	*PAT/J6	*PAT/J6
R521	*PAT/J6	*PAT/J6
R523	*PAT/J6	*PAT/J6
R524	*PAT/J6	*PAT/J6
R525	*PAT/J6	*PAT/J6
R527	*PAT/J6	*PAT/J6
R528	*PAT/J6	*PAT/J6
R535	*PAT/J6	*PAT/J6
R536	*PAT/J6	*PAT/J6
R537	*PAT/J6	*PAT/J6
R538	*PAT/J6	*PAT/J6
R543	*PAT/J6	*PAT/J6
R544	*PAT/J6	*PAT/J6
R547	*PAT/J6	*PAT/J6
R562	*PAT/J6	*PAT/J6
R563	*PAT/J6	*PAT/J6
R564	*PAT/J6	*PAT/J6
R565	*PAT/J6	*PAT/J6
R588	*PAT/J6	*PAT/J6
R589	*PAT/J6	*PAT/J6
R590	*PAT/J6	*PAT/J6
R591	*PAT/J6	*PAT/J6

REF	NTSC	PAL
R592	*PAT/J6	*PAT/J6
R593	*PAT/J6	*PAT/J6
R594	*PAT/J6	*PAT/J6
R609	*PAT/J6	*PAT/J6
R614	*PAT/J6	*PAT/J6
R615	*PAT/J6	*PAT/J6
R616	*PAT/J6	*PAT/J6
R617	*PAT/J6	*PAT/J6
R618	0/J6	0/J6
R619	0/J6	0/J6
R620	0/J6	0/J6
R621	10K/J6	10K/J6
R622	10K/J6	10K/J6
R623	10K/J6	10K/J6
R624	10K/J6	10K/J6
R625	10K/J6	10K/J6
R626	10K/J6	10K/J6
R627	10K/J6	10K/J6
R628	10K/J6	10K/J6
R629	*PAT/J6	*PAT/J6
R630	0/J6	0/J6
R631	*PAT/J6	*PAT/J6
R632	*PAT/J6	*PAT/J6
R633	0/J6	0/J6
R634	*PAT/J6	*PAT/J6
R635	0/J6	0/J6
R636	*PAT/J6	*PAT/J6
R637	0/J6	0/J6
R638	*PAT/J6	*PAT/J6
R639	*PAT/J6	*PAT/J6
R640	0/J6	0/J6
R760	0/J6	*PAT/J6
R761	*PAT/J6	*PAT/J6
R763	*PAT/J6	*PAT/J6
R88	100K/J6	*PAT/J6
R89	*PAT/J6	100K/J6
TG2	*PAT	*PAT
TP1	*PAT	*PAT
TP10	*PAT	*PAT
TP11	*PAT	*PAT
TP12	*PAT	*PAT
TP2	*PAT	*PAT
TP3	*PAT	*PAT

REF	NTSC	PAL
TP4	*PAT	*PAT
TP5	*PAT	*PAT
TP500	*PAT	*PAT
TP501	*PAT	*PAT
TP502	*PAT	*PAT
TP503	*PAT	*PAT
TP504	*PAT	*PAT
TP505	*PAT	*PAT
TP506	*PAT	*PAT
TP6	*PAT	*PAT
TP7	*PAT	*PAT
TP701	*PAT	*PAT
TP702	*PAT	*PAT
TP9	*PAT	*PAT
VR701	*PAT/VR3	*PAT/VR3
X703	VSX0614-T	VSX0615-T

F E D C B A

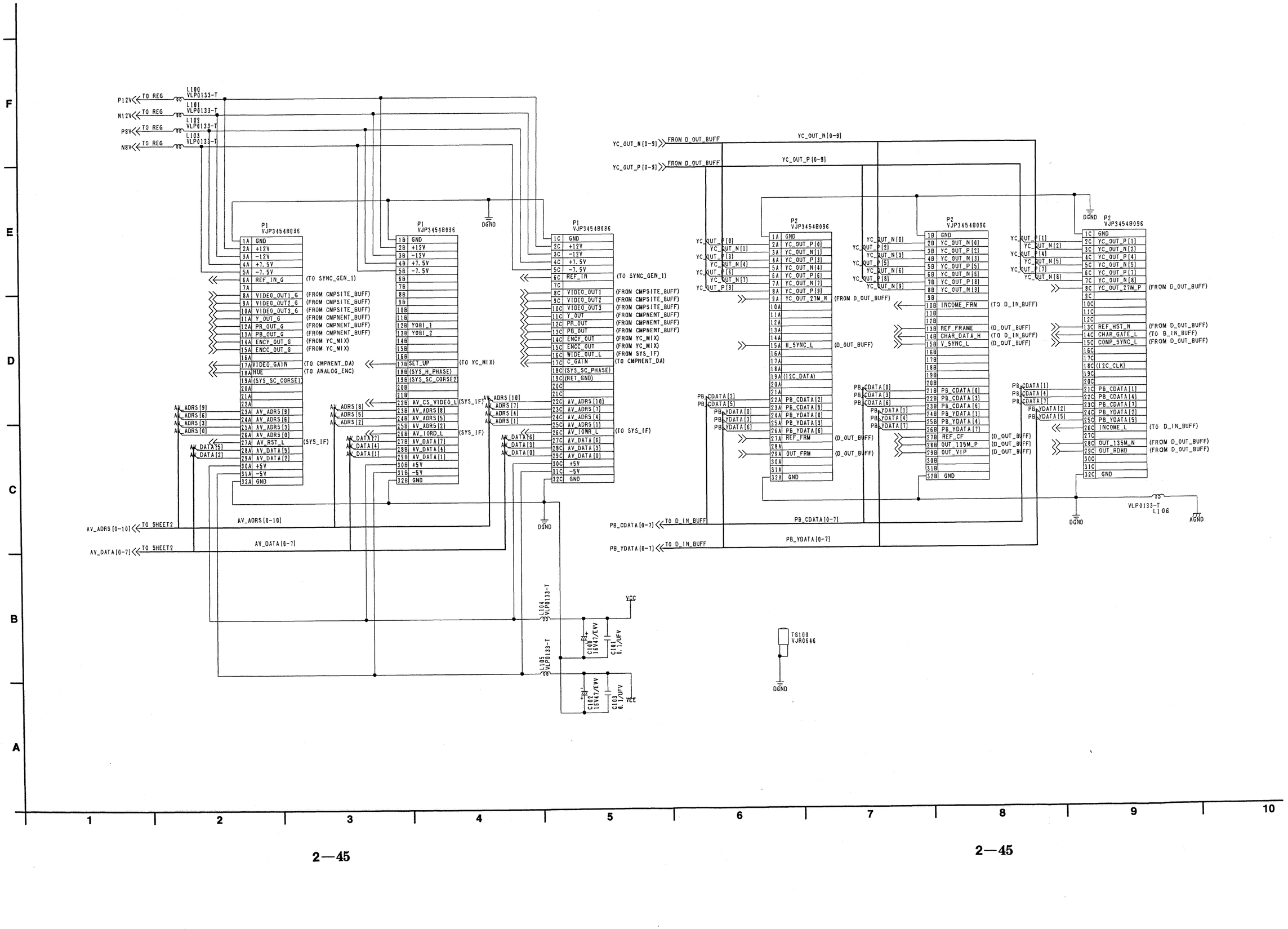
1 2 3 4 5 6 7 8 9 10

REVERSE SIDE

F2 SYSCON 13/14

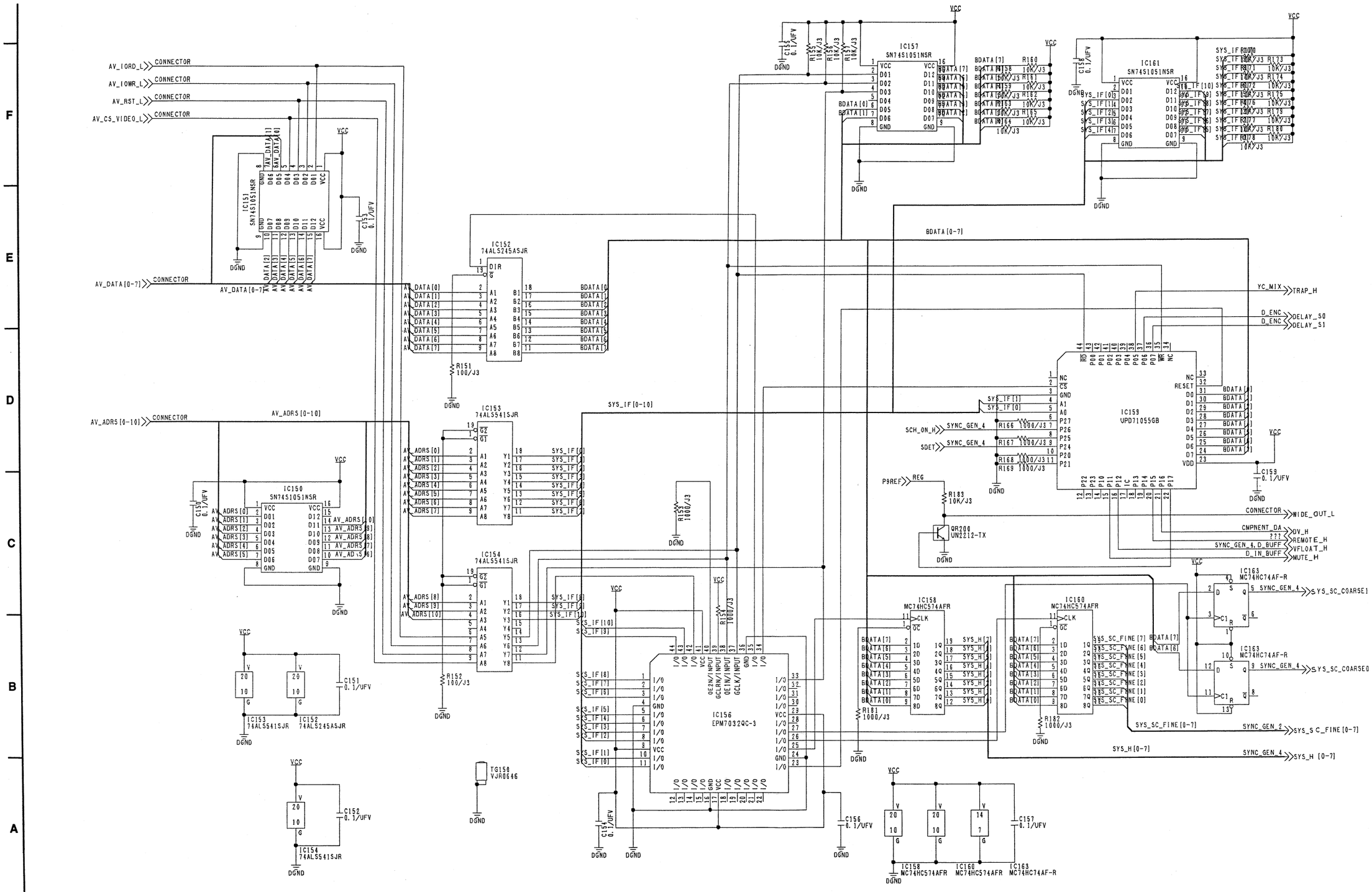
2—44

F4 V OUT 1/16 (CONNECTOR) SCHEMATIC DIAGRAM



2—45

F4 V OUT 2/16 (SYS IF) SCHEMATIC DIAGRAM

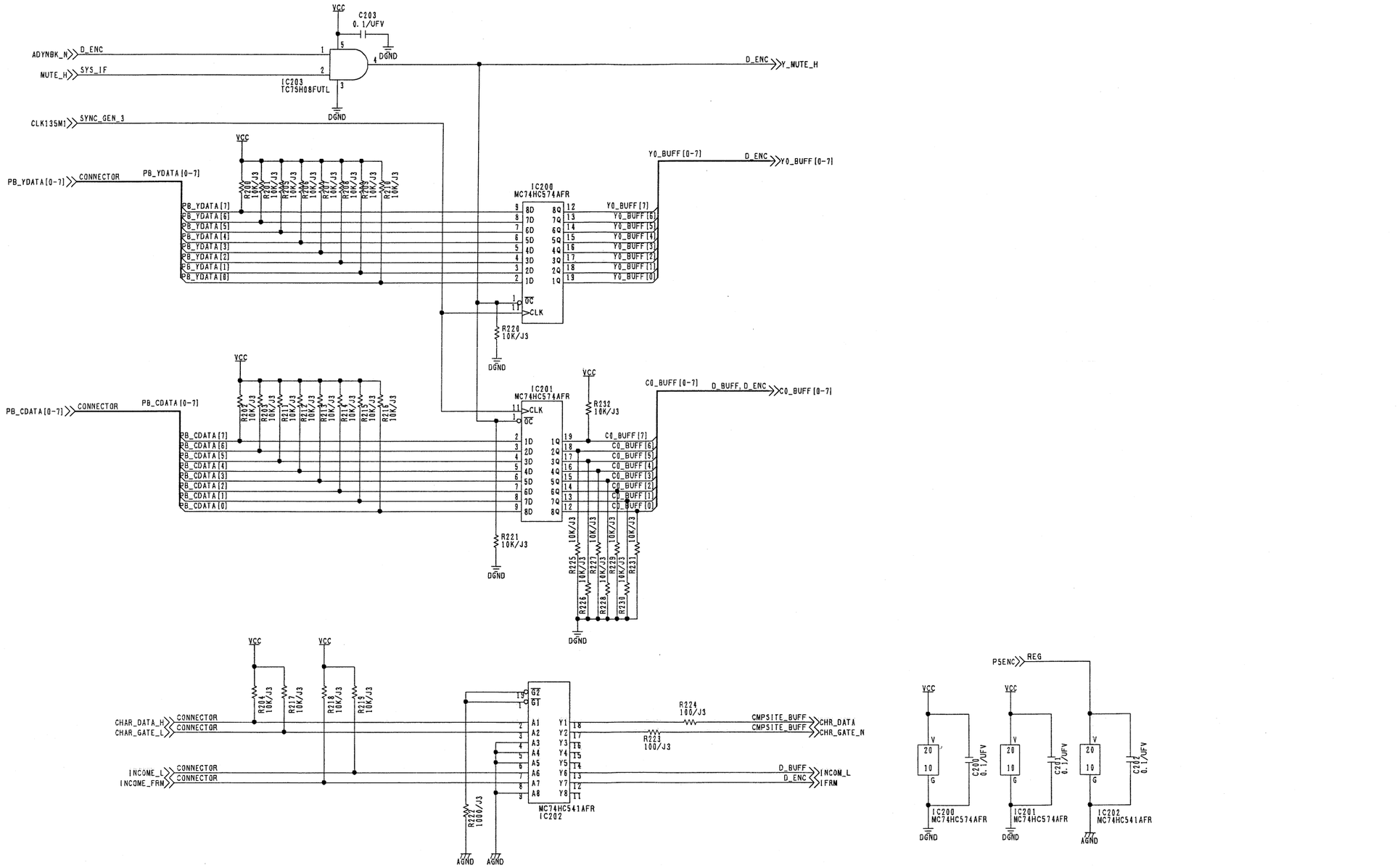


REVERSE SIDE

F4 V OUT 1/16

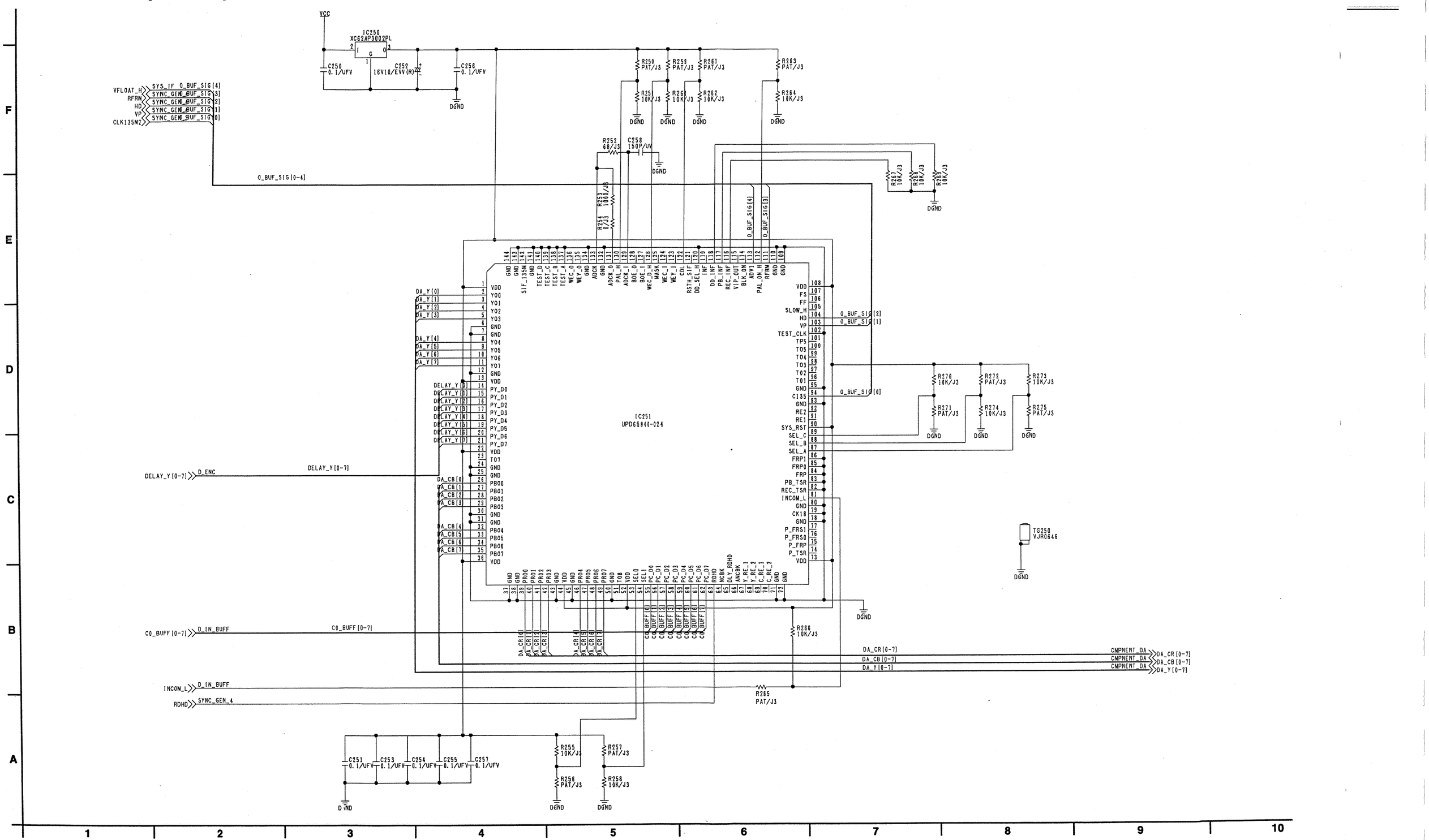
2—46

F4 V OUT 3/16 (D IN BUFF) SCHEMATIC DIAGRAM



2—47

F4 V OUT 4/16 (D BUFF) SCHEMATIC DIAGRAM

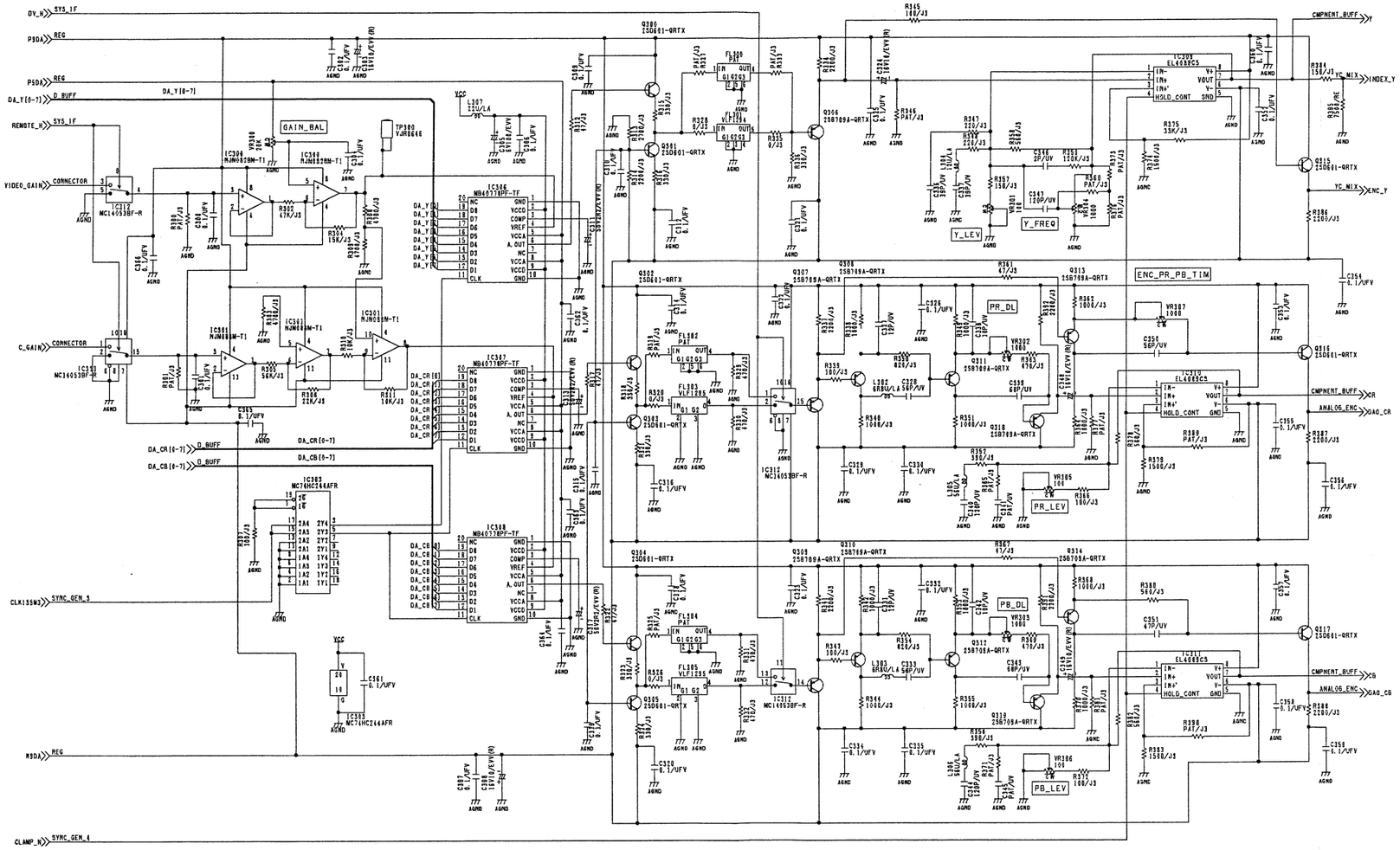


REVERSE SIDE

F4 V OUT 3/16

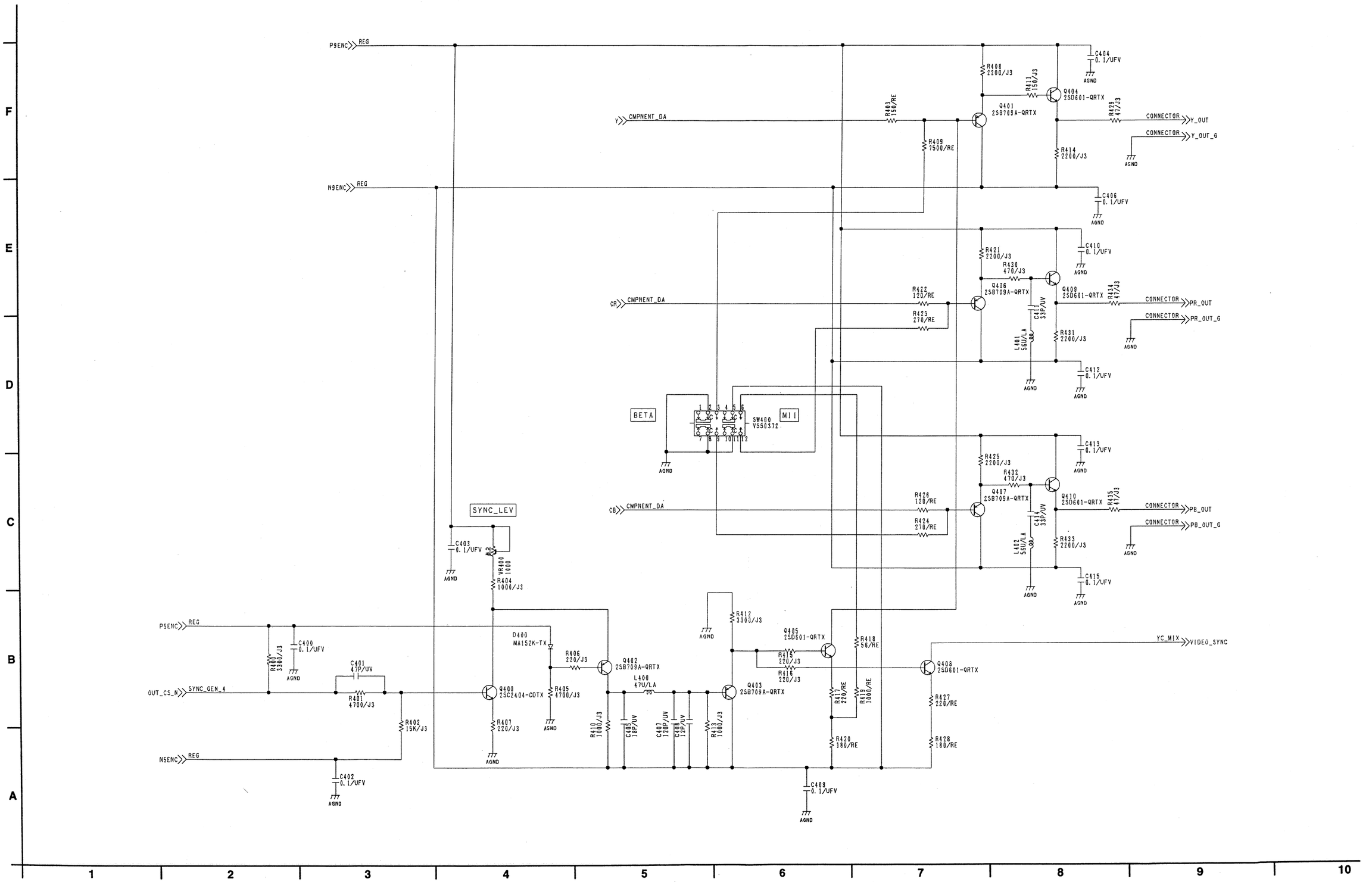
2—48

F4 V OUT 5/16 (COMPONENT DA) SCHEMATIC DIAGRAM



2—49

F4 V OUT 6/16 (COMPONENT BUFF) SCHEMATIC DIAGRAM

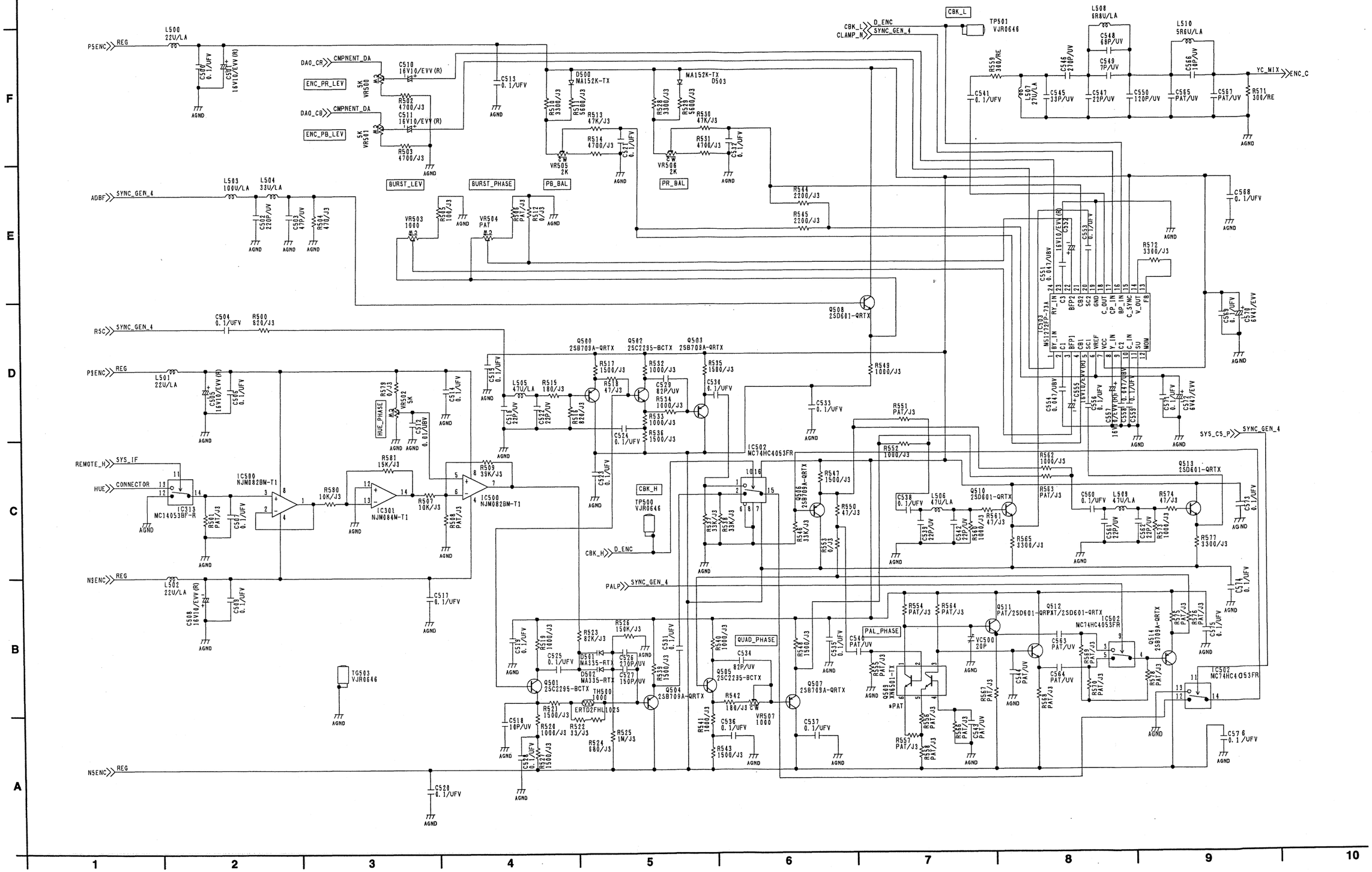


REVERSE SIDE

F4 V OUT 5/16

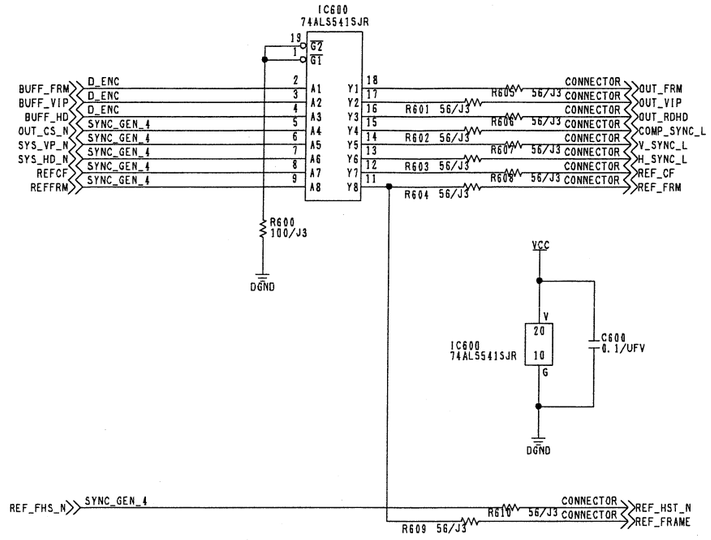
2—50

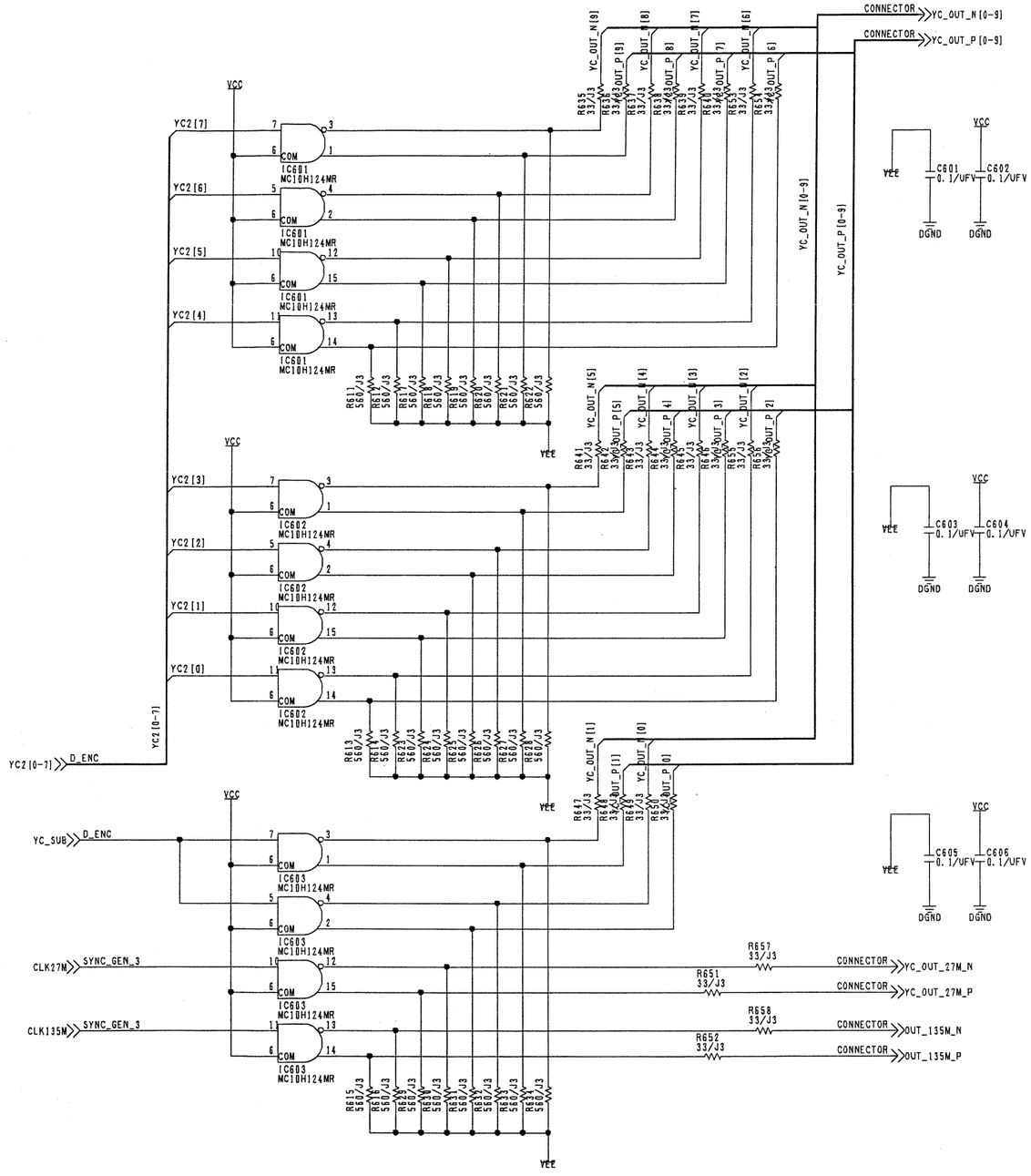
F4 V OUT 7/16 (ANALOG ENC) SCHEMATIC DIAGRAM



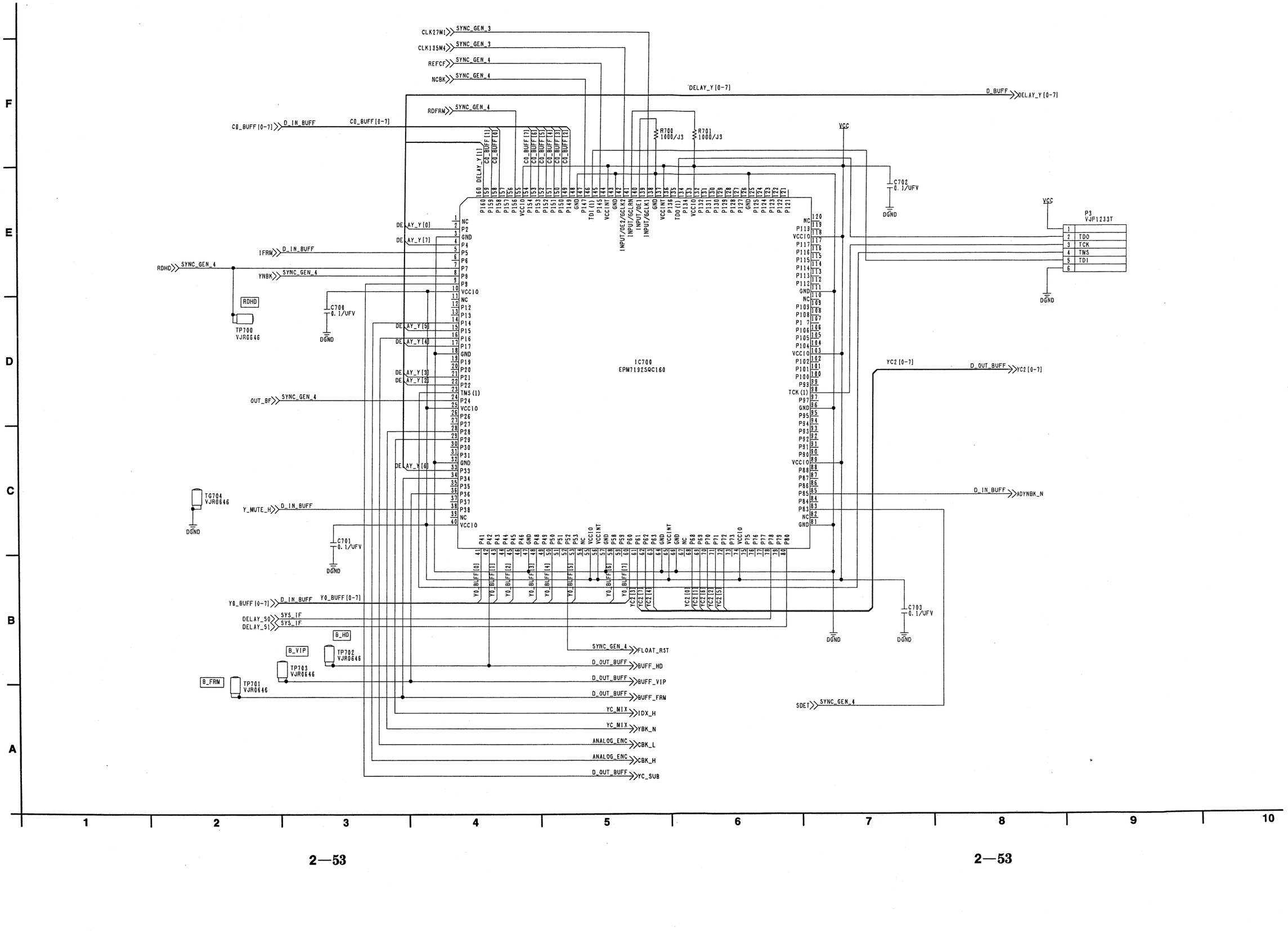
2—51

F4 V OUT 8/16 (D OUT BUFF) SCHEMATIC DIAGRAM



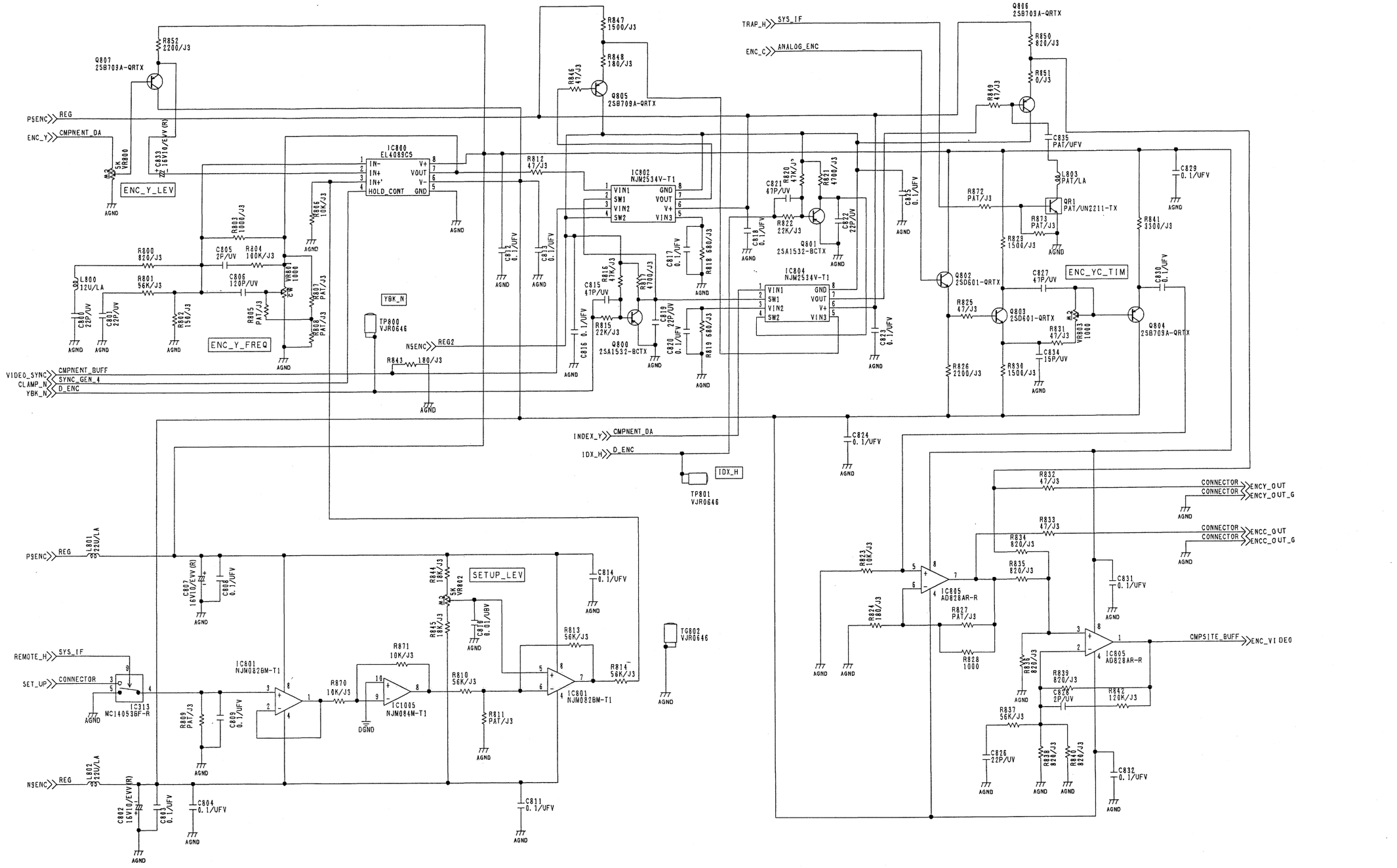


F4 V OUT 9/16 (D ENC) SCHEMATIC DIAGRAM



2—53

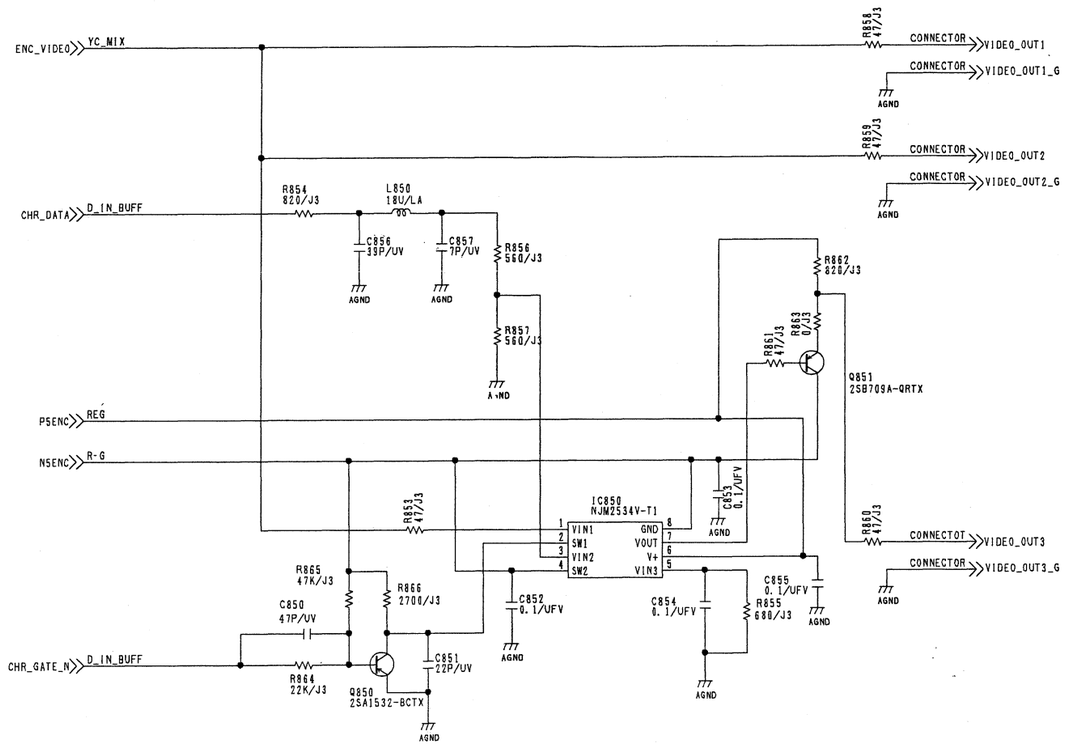
F4 V OUT 10/16 (YC MIX) SCHEMATIC DIAGRAM



REVERSE SIDE
F4 V OUT 9/16

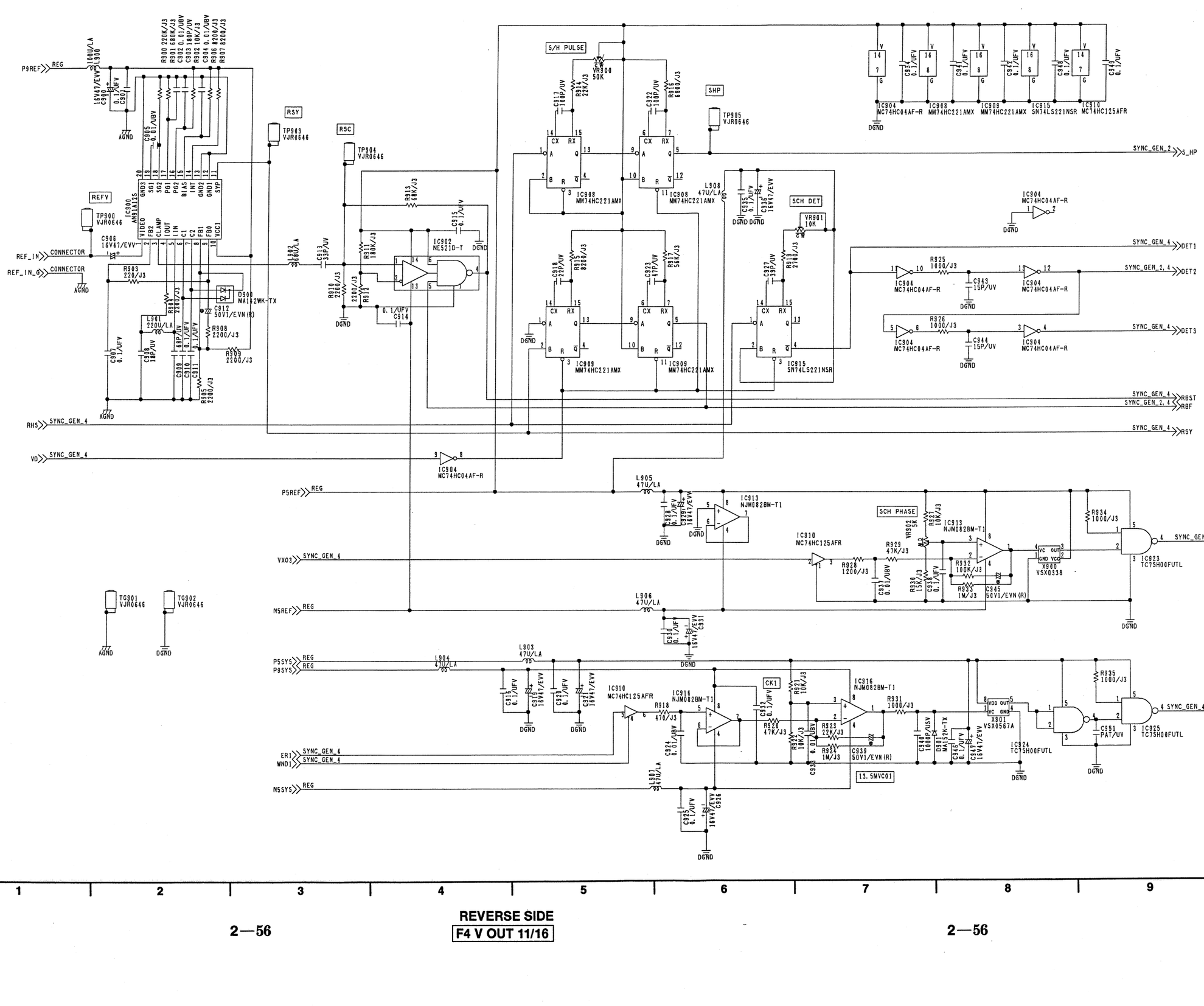
2—54

F4 V OUT 11/16 (COMPOSITE BUFF) SCHEMATIC DIAGRAM



2—55

F4 V OUT 12/16 (SYNC GEN 1) SCHEMATIC DIAGRAM

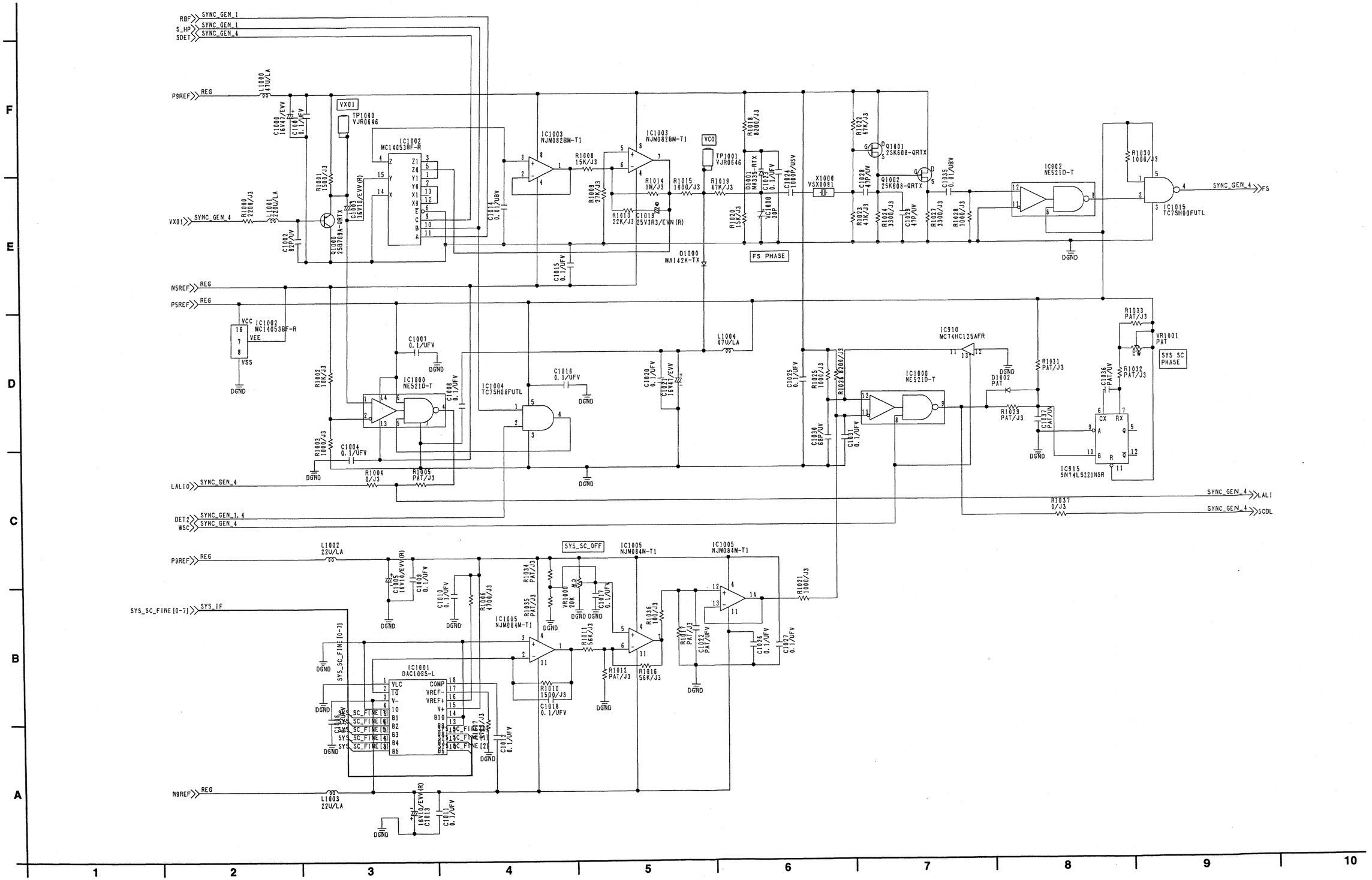


REVERSE SIDE

F4 V OUT 11/16

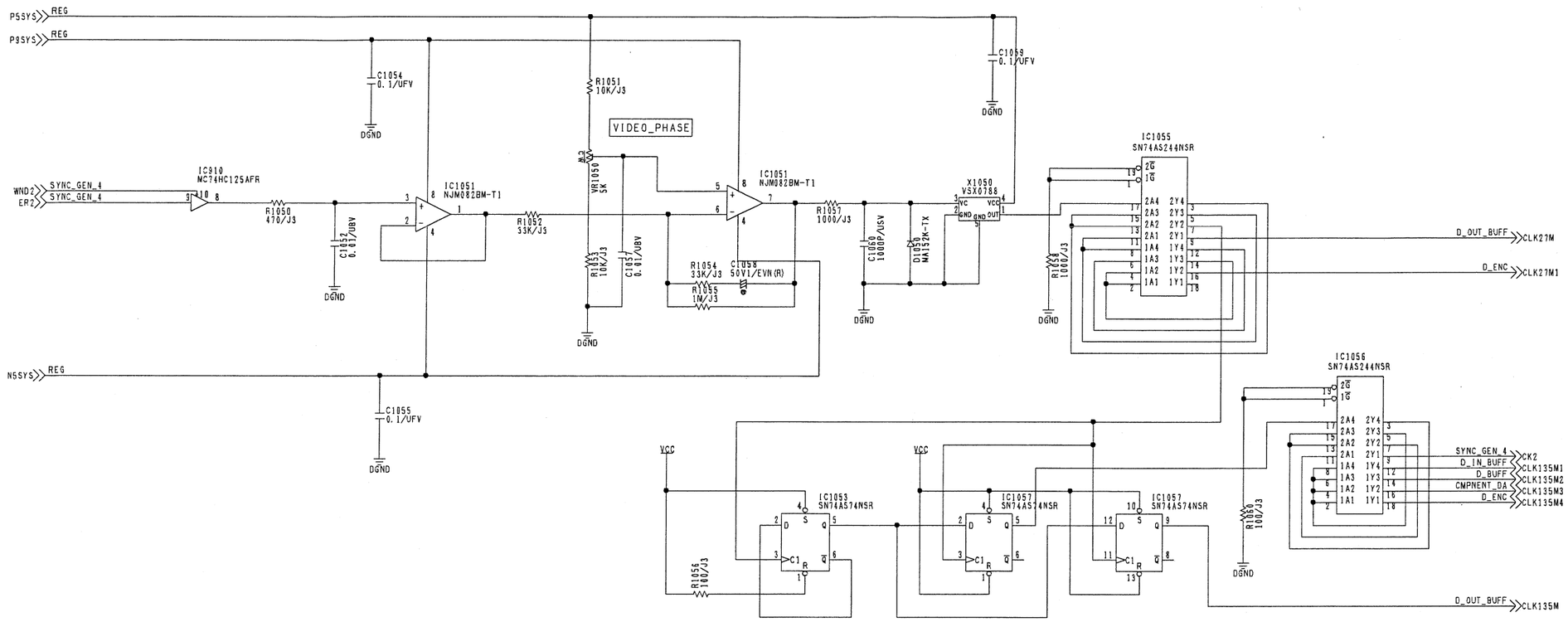
2—56

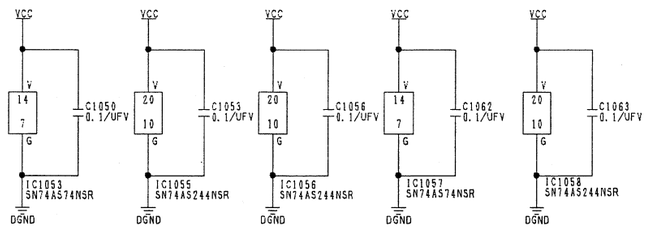
F4 V OUT 13/16 (SYNC GEN 2) SCHEMATIC DIAGRAM

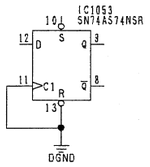


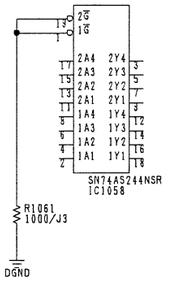
2—57

F4 V OUT 14/16 (SYNC GEN 3) SCHEMATIC DIAGRAM

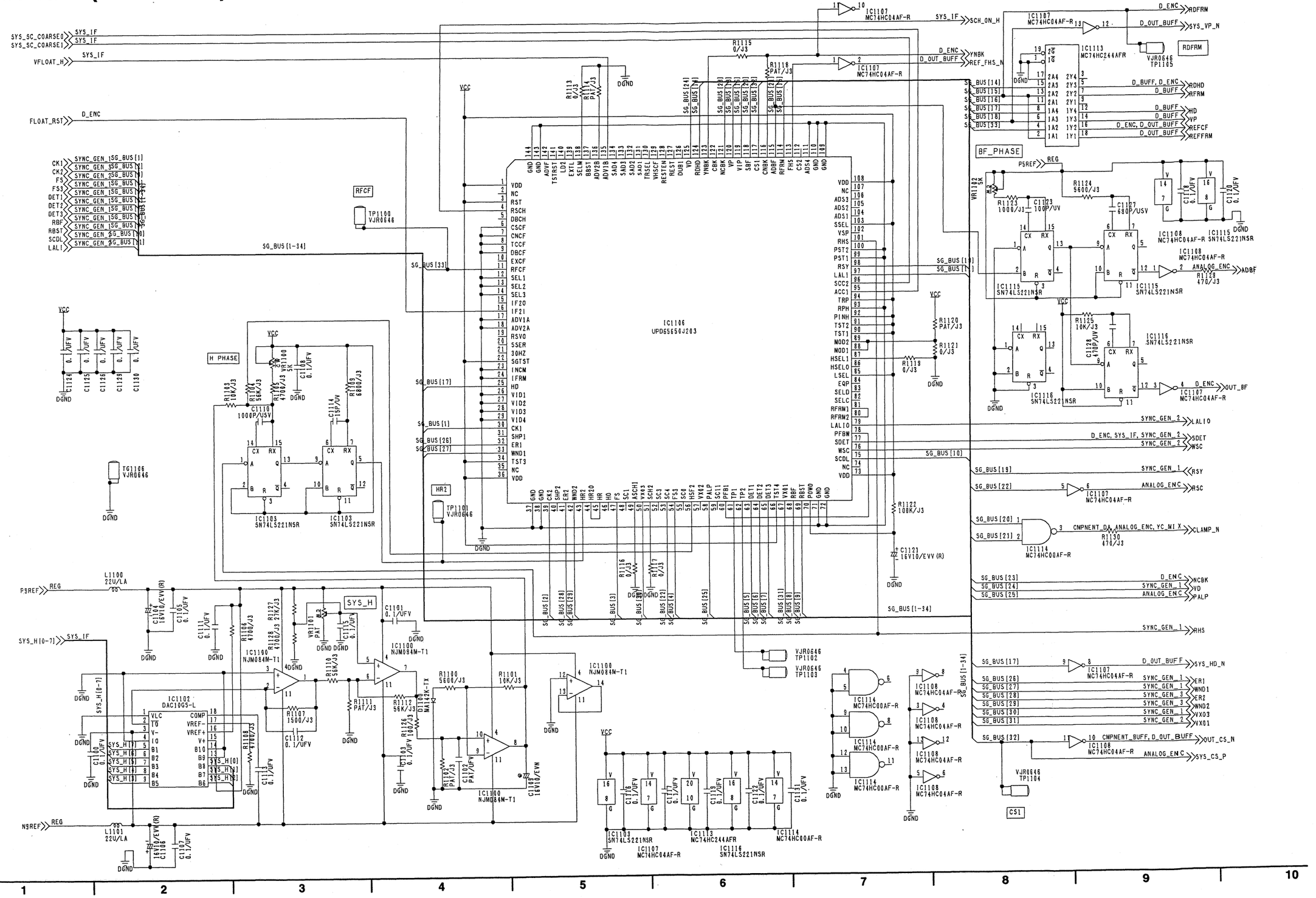






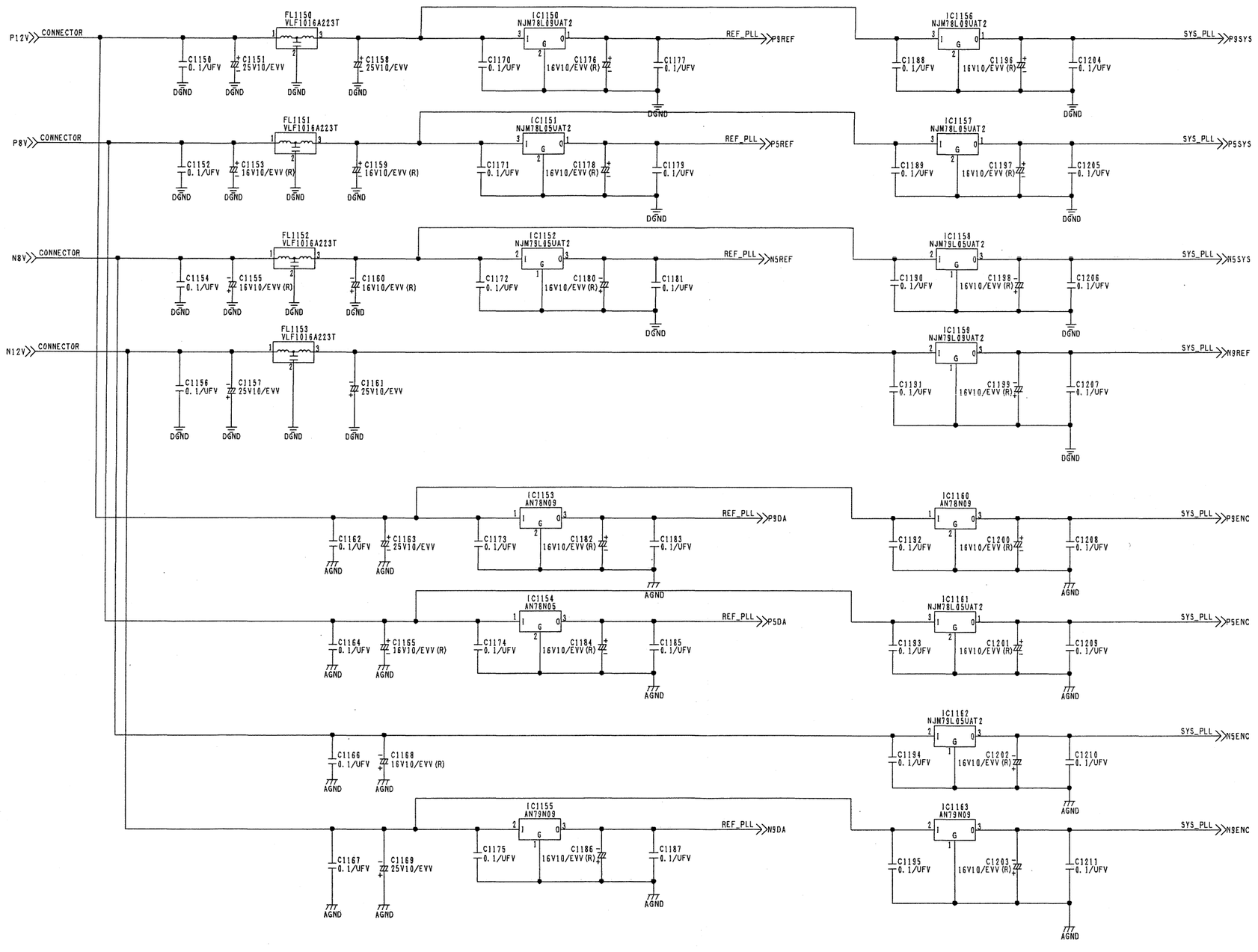


F4 V OUT 15/16 (SYNC GEN 4) SCHEMATIC DIAGRAM

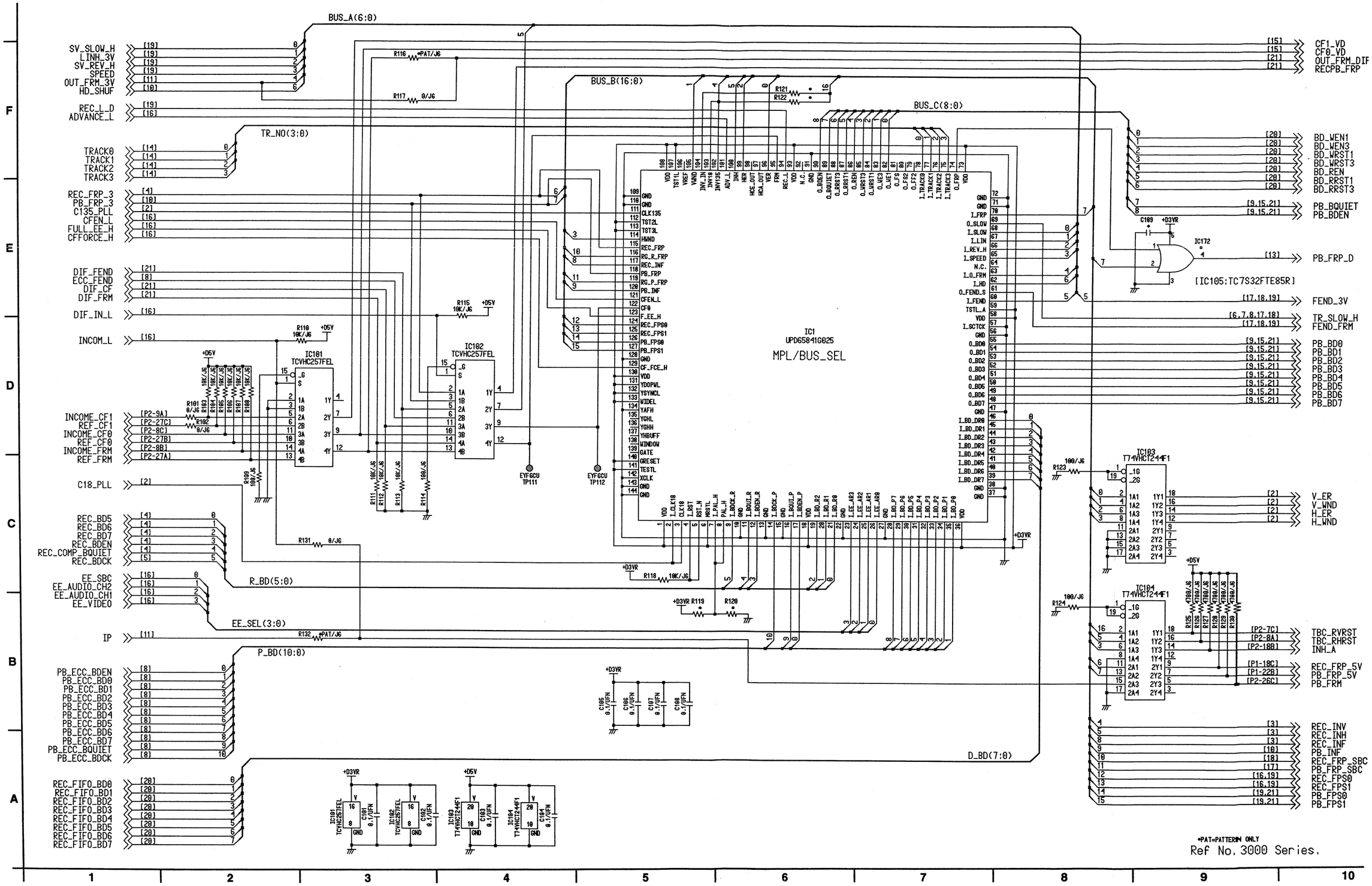


2—59

F4 V OUT 16/16 (REG) SCHEMATIC DIAGRAM

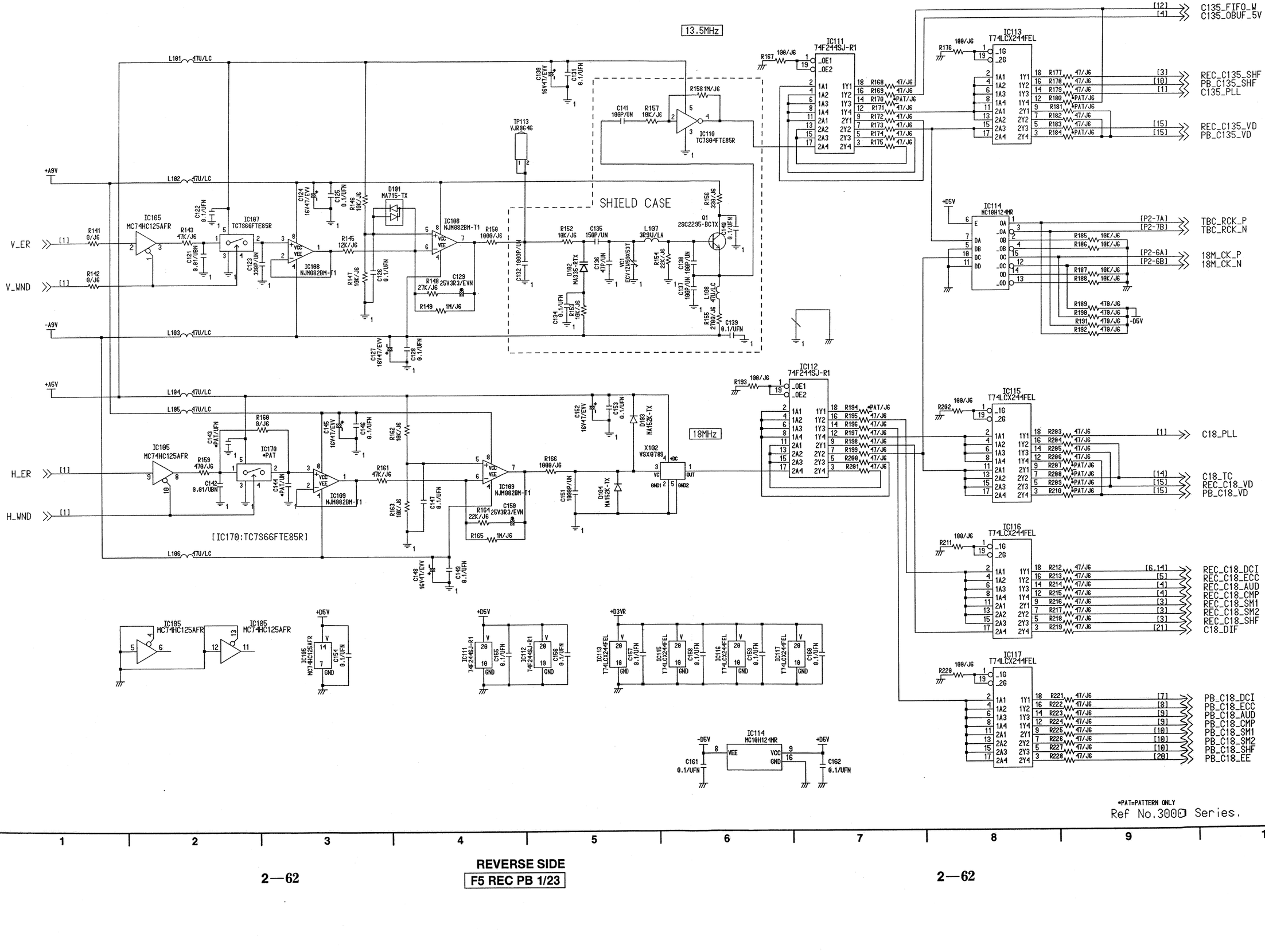


F5 REC PB 1/23 (MPL/BUS SEL) SCHEMATIC DIAGRAM



2—61

F5 REC PB 2/23 (PLL) SCHEMATIC DIAGRAM

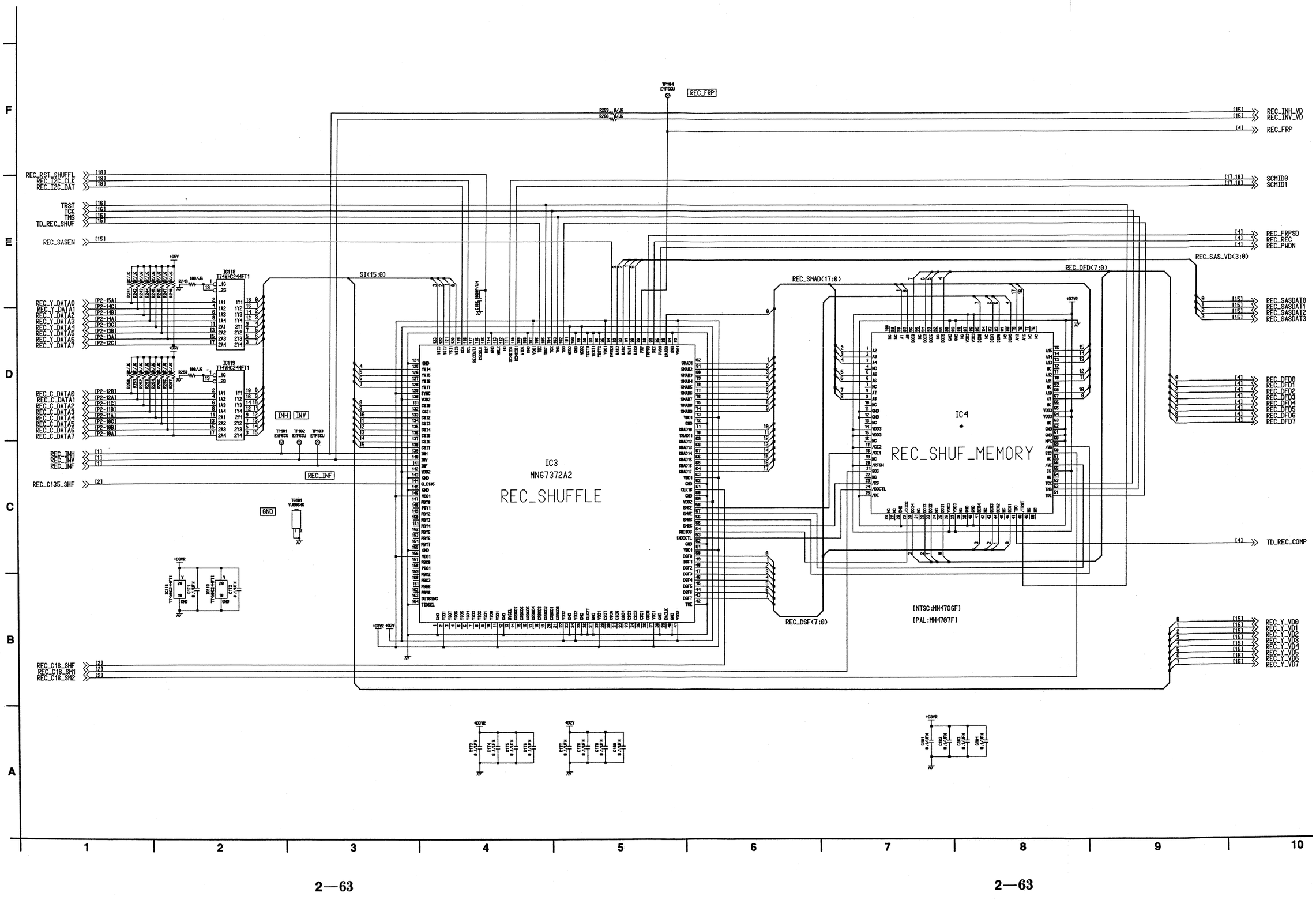


REVERSE SIDE

F5 REC PB 1/23

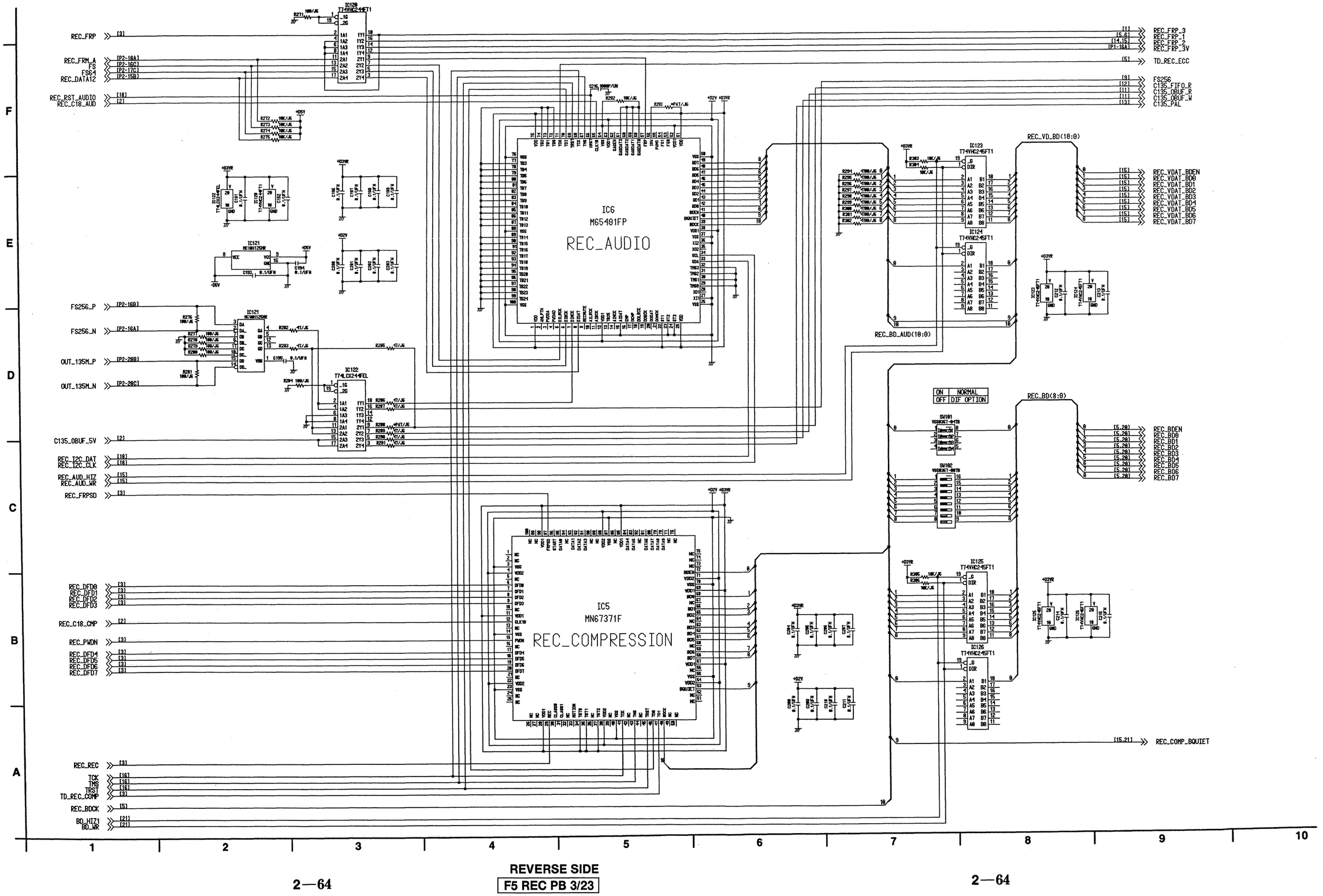
2—62

F5 REC PB 3/23 (REC SHUF) SCHEMATIC DIAGRAM



2—63

F5 REC PB 4/23 (REC COMP, AUD) SCHEMATIC DIAGRAM

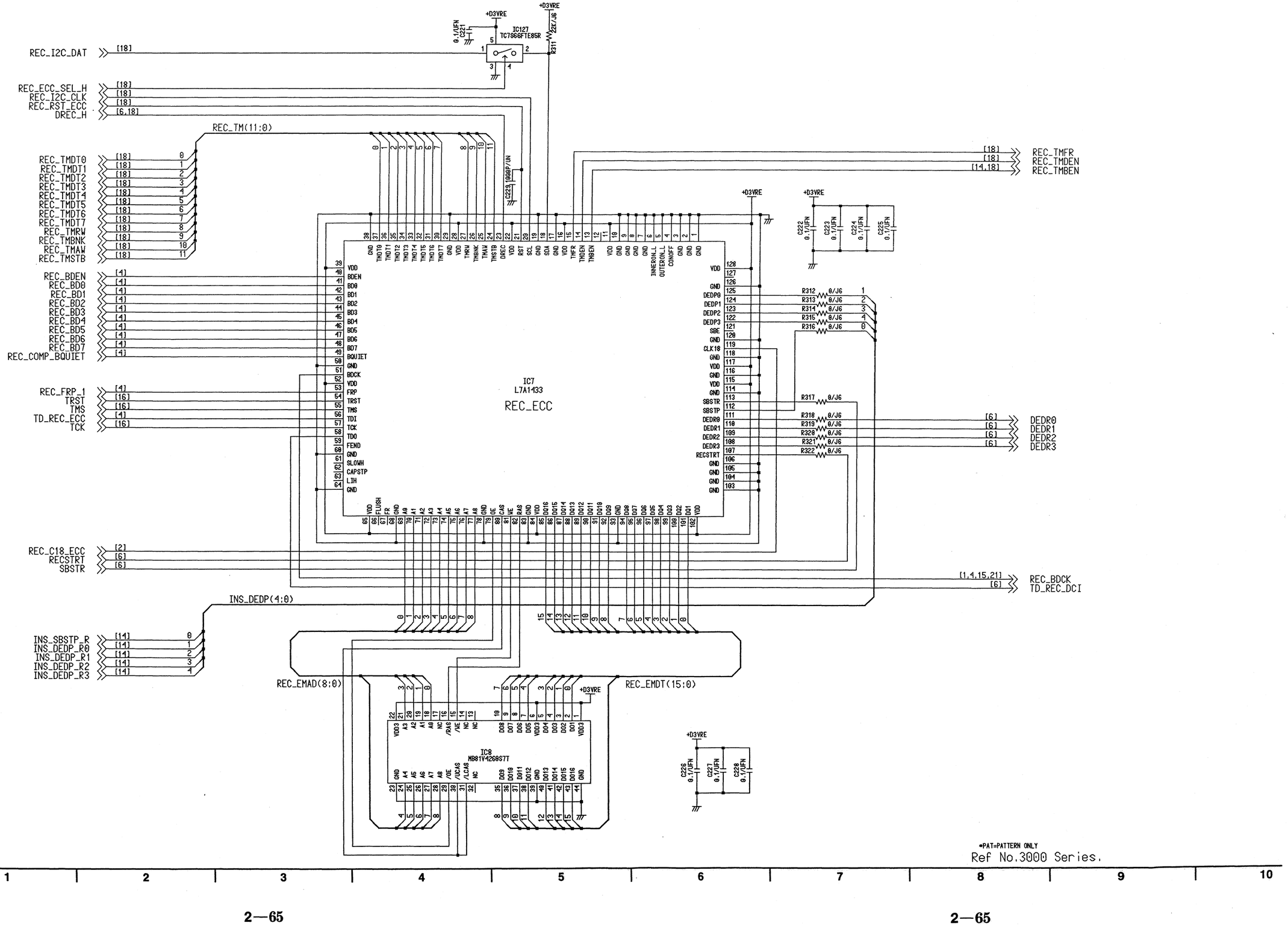


REVERSE SIDE

F5 REC PB 3/23

2—64

F5 REC PB 5/23 (REC ECC) SCHEMATIC DIAGRAM

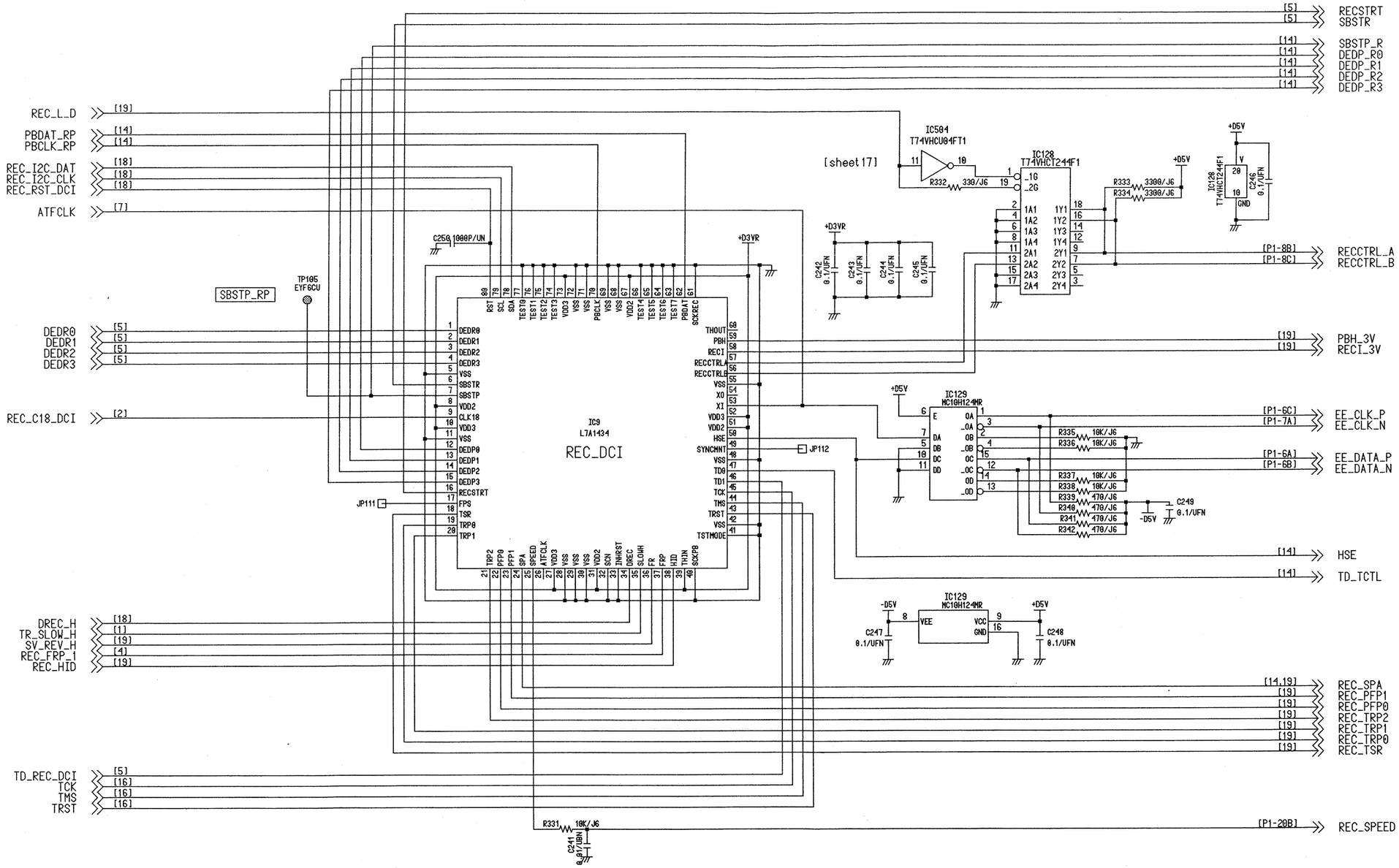


*PAT=PATTERN ONLY

Ref No.3000 Series.

2—65

F5 REC PB 6/23 (REC DCI) SCHEMATIC DIAGRAM

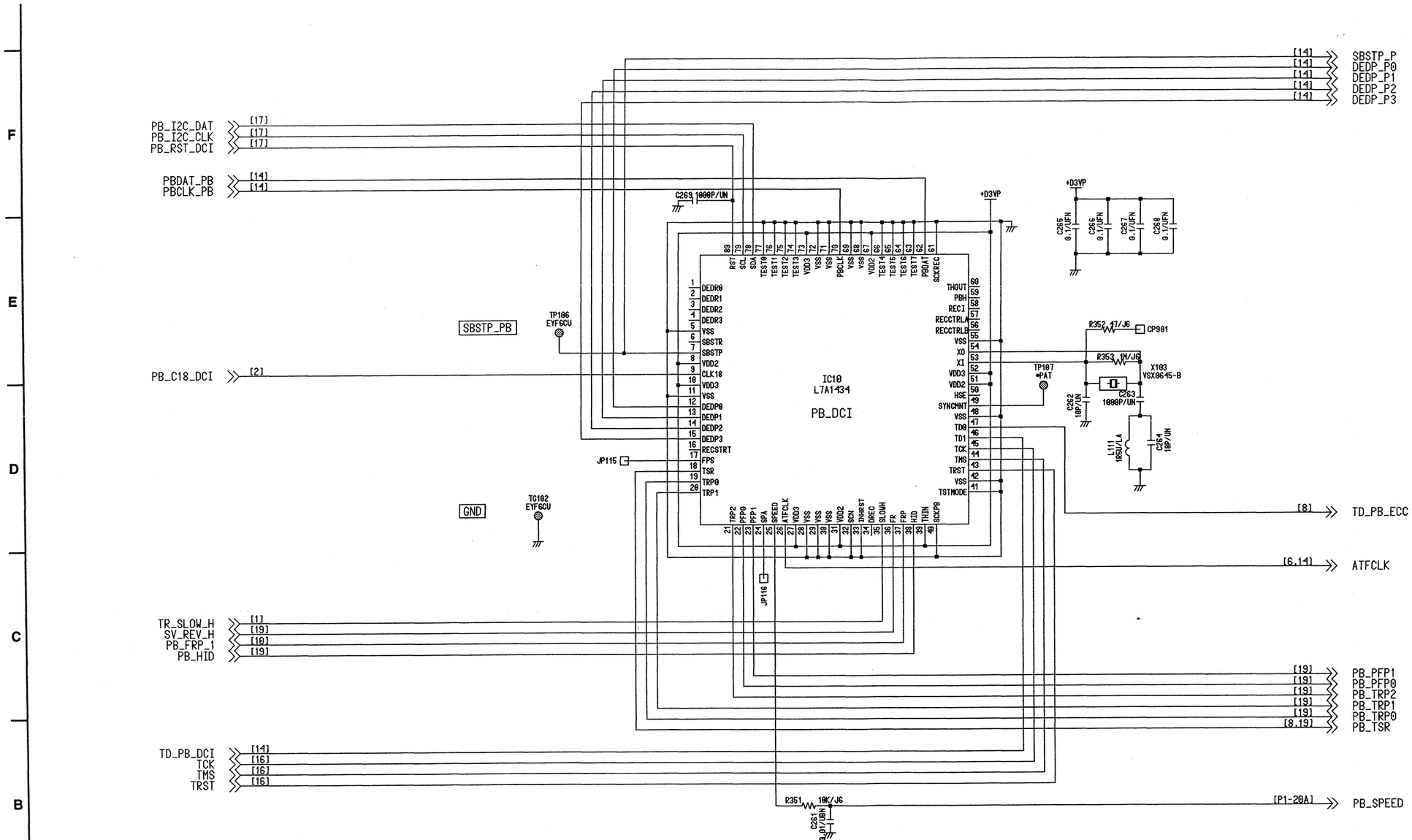


*PAT=PATTERN ONLY
Ref No.3000 Series.

REVERSE SIDE
F5 REC PB 5/23

2—66

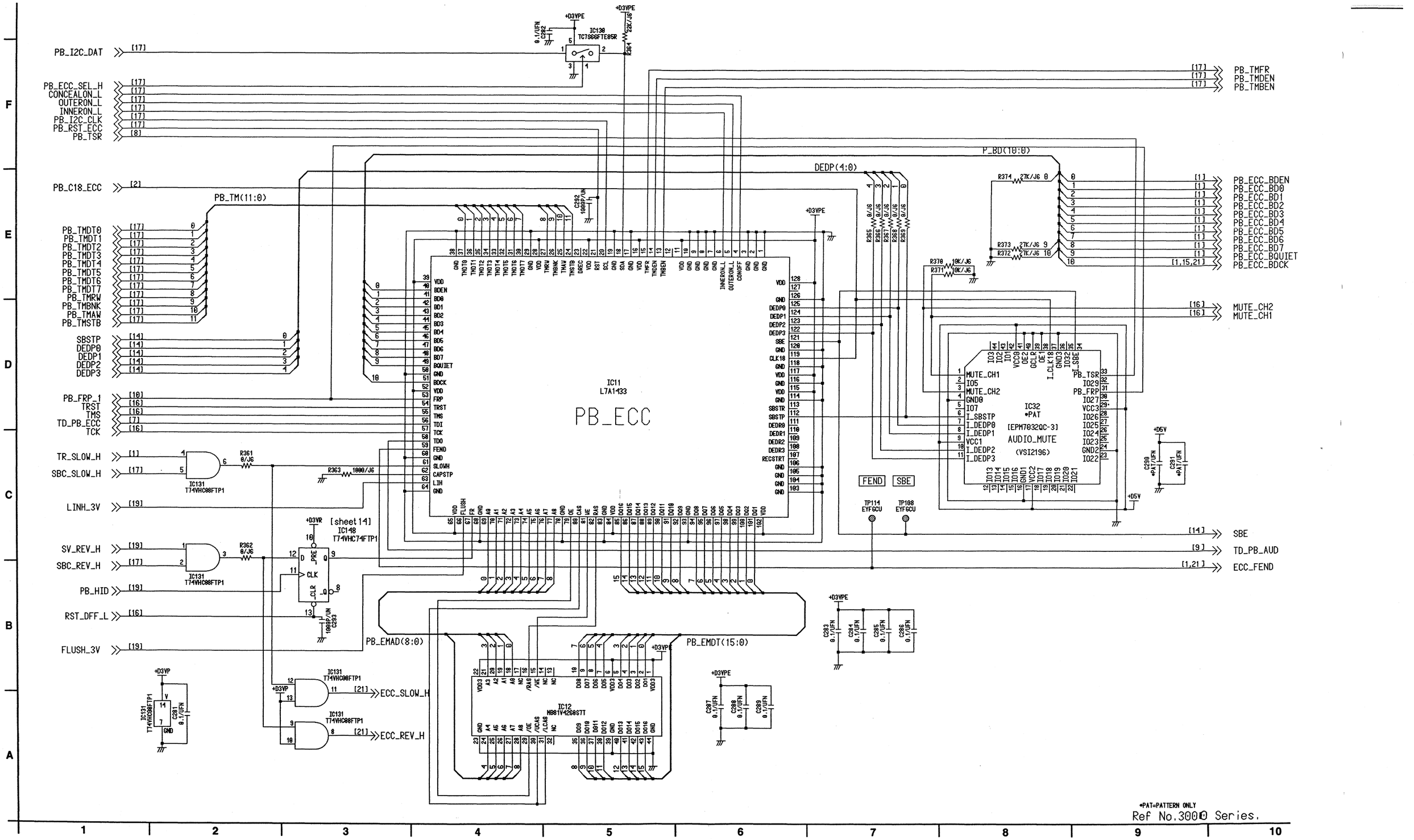
F5 REC PB 7/23 (PB DCI) SCHEMATIC DIAGRAM



*PAT=PATTERN ONLY
Ref No.3000 Series.

2—67

F5 REC PB 8/23 (PB ECC) SCHEMATIC DIAGRAM

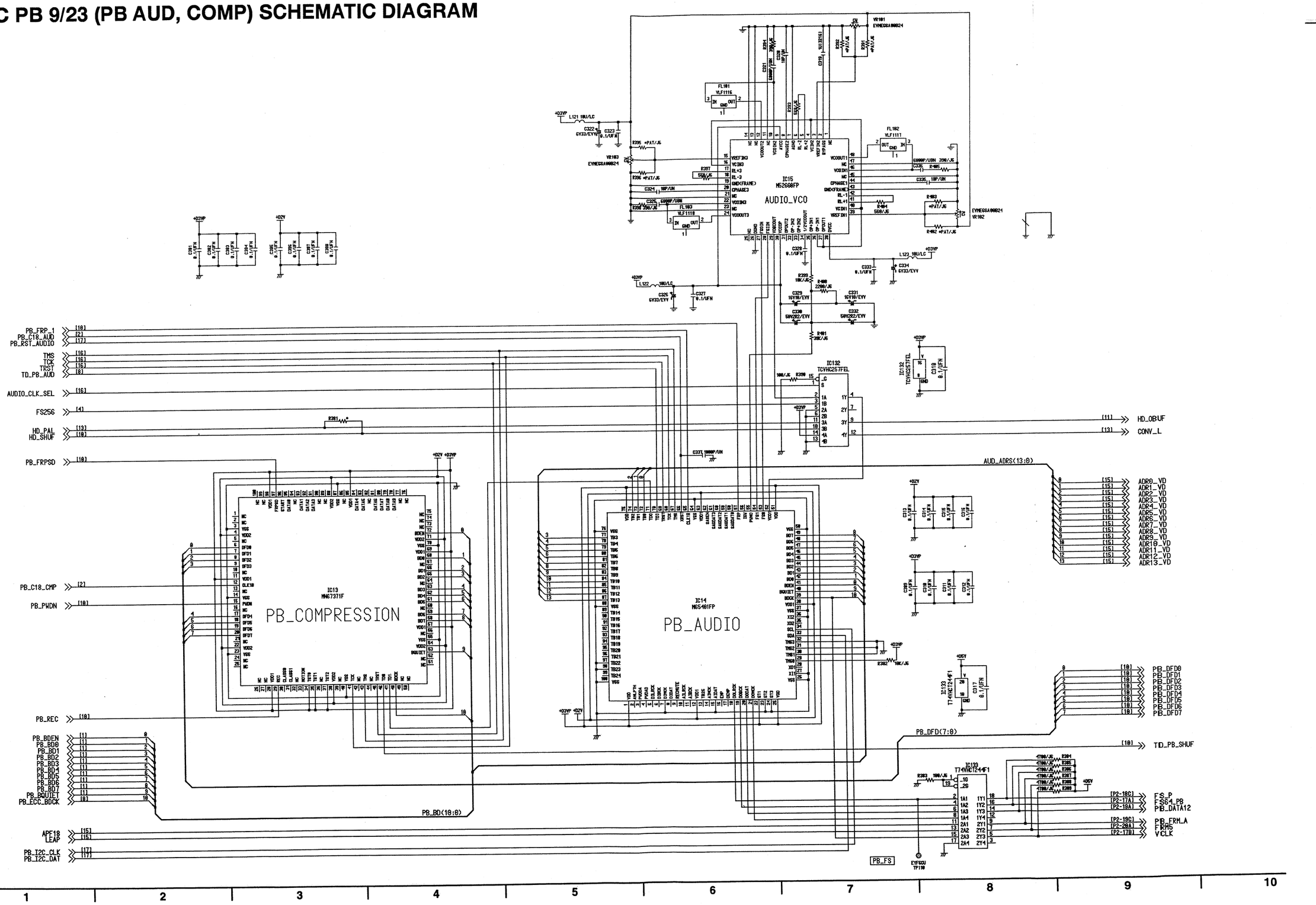


REVERSE SIDE

F5 REC PB 7/23

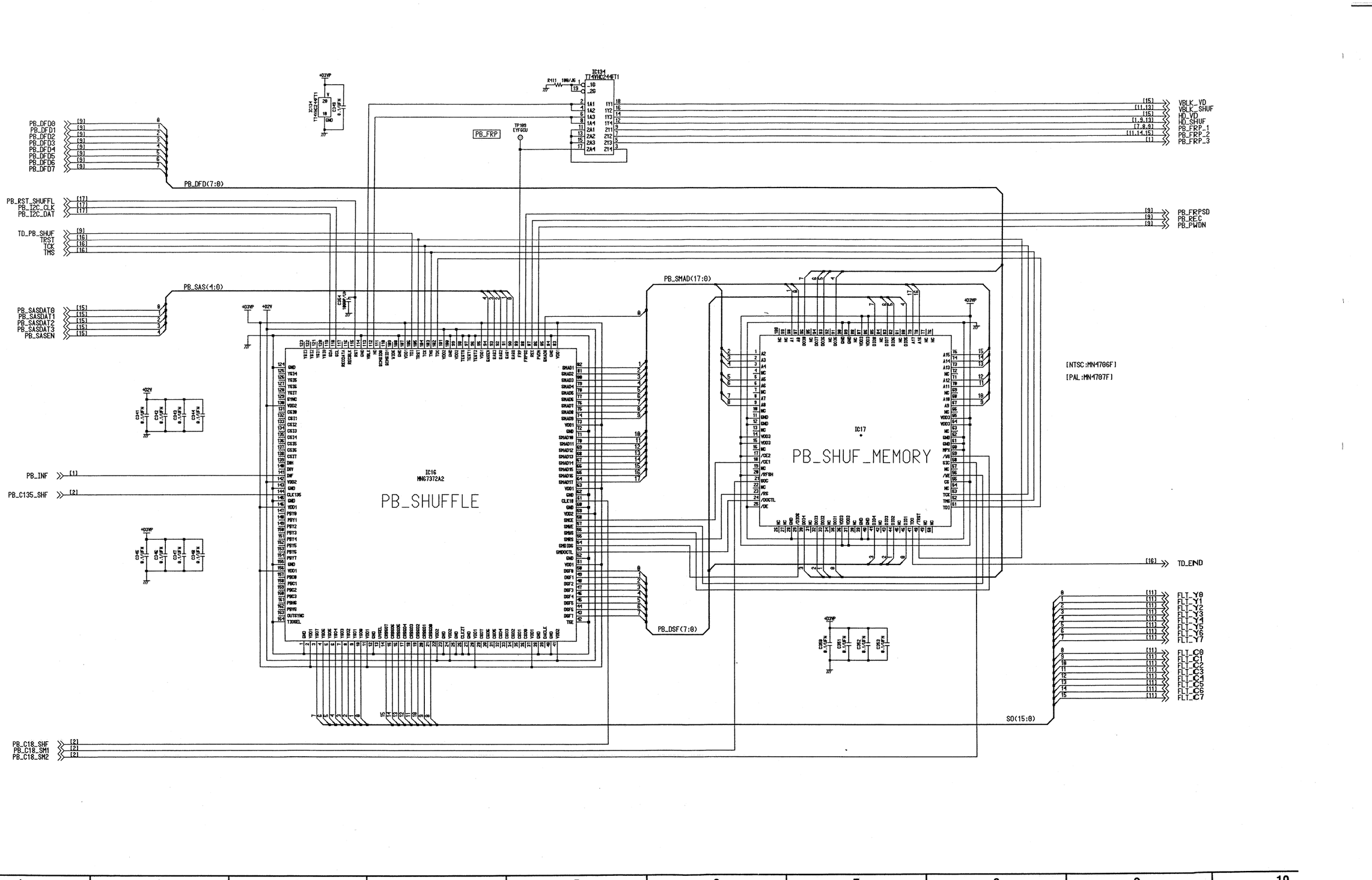
2—68

F5 REC PB 9/23 (PB AUD, COMP) SCHEMATIC DIAGRAM



2—69

F5 REC PB 10/23 (PB SHUF) SCHEMATIC DIAGRAM

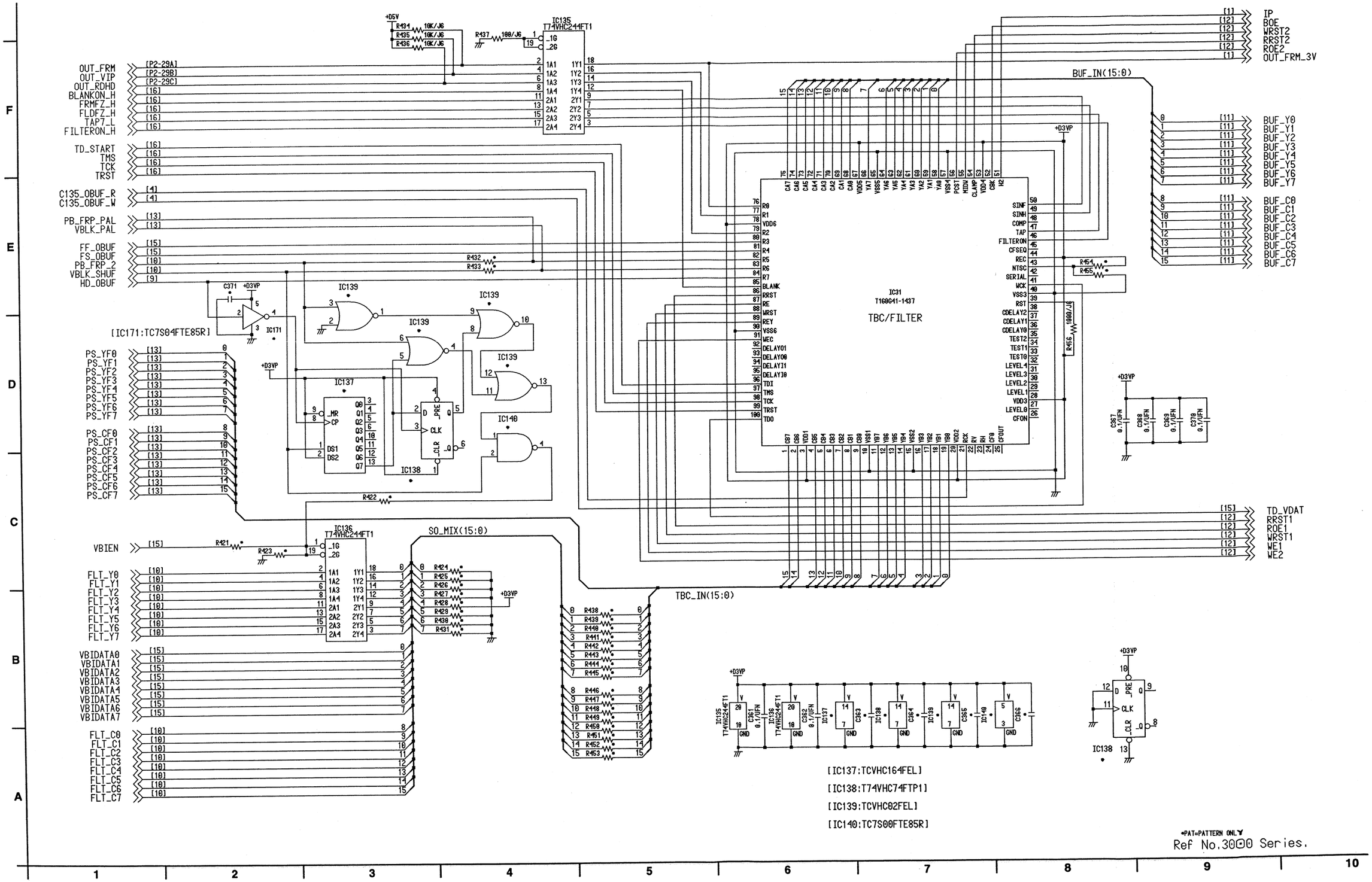


REVERSE SIDE

F5 REC PB 9/23

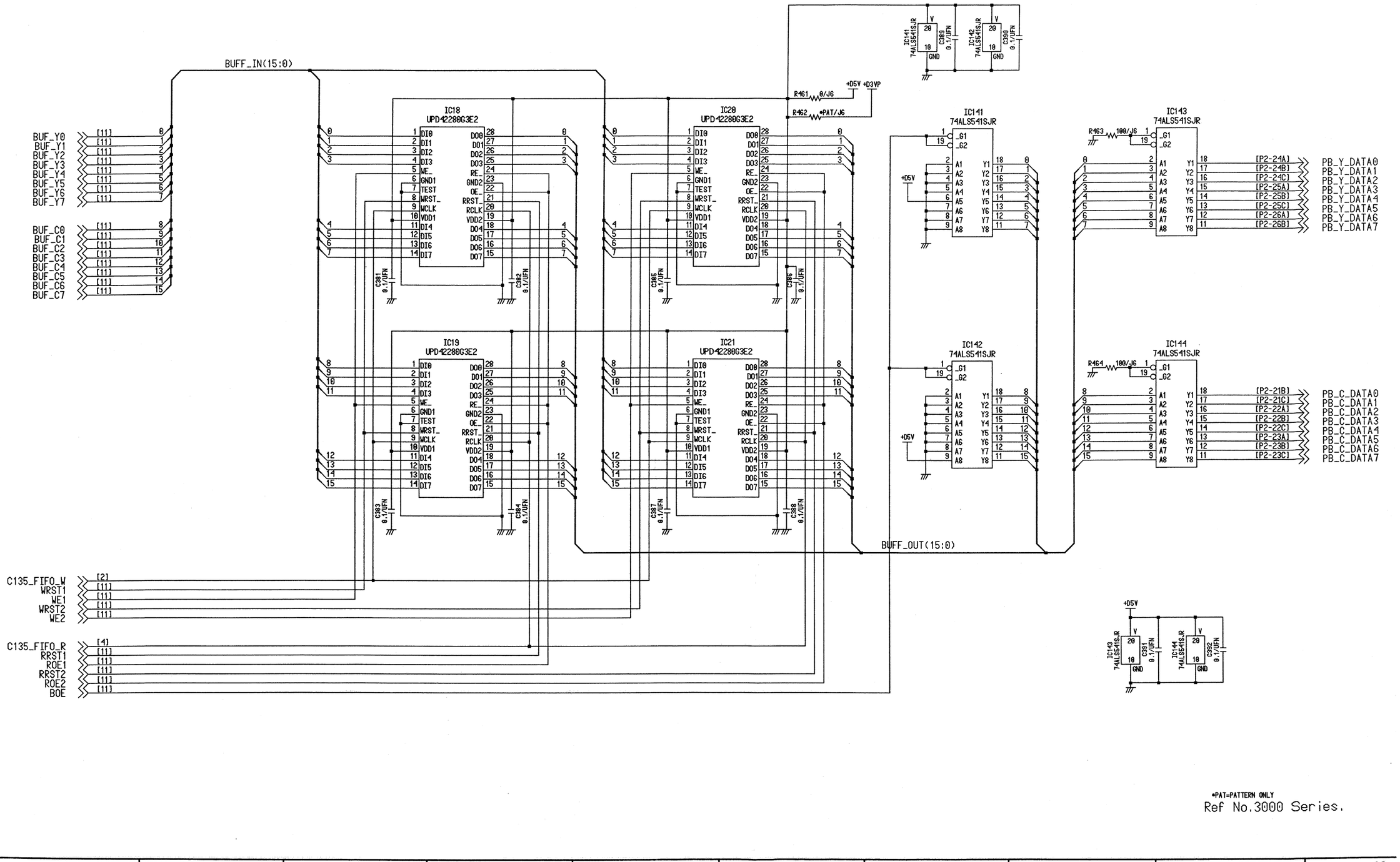
2—70

F5 REC PB 11/23 (TBC/FILTER) SCHEMATIC DIAGRAM



2—71

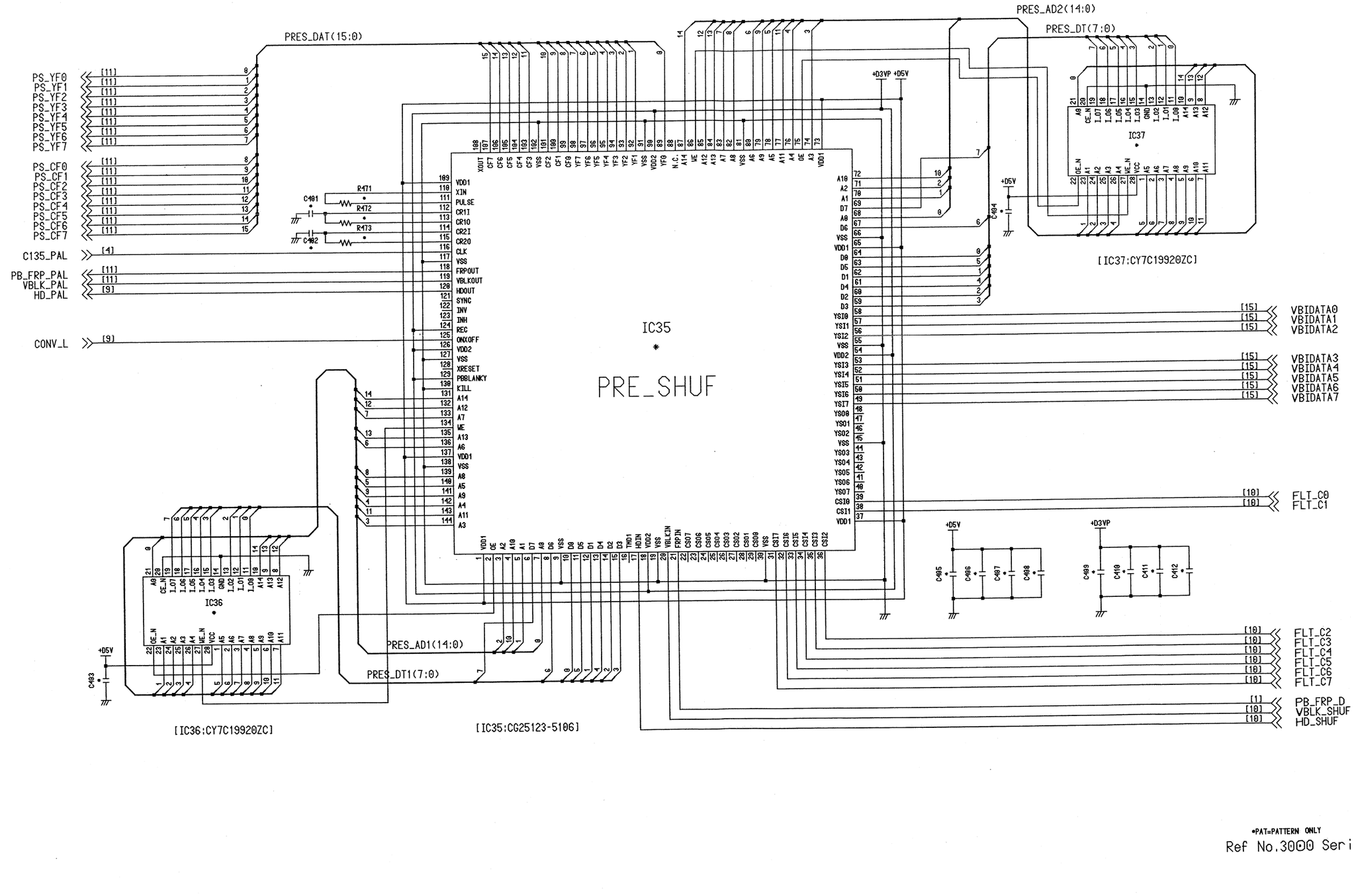
F5 REC PB 12/23 (OUT BUFF2) SCHEMATIC DIAGRAM



*PAT=PATTERN ONLY

Ref No.3000 Series.

F5 REC PB 13/23 (PAL) SCHEMATIC DIAGRAM

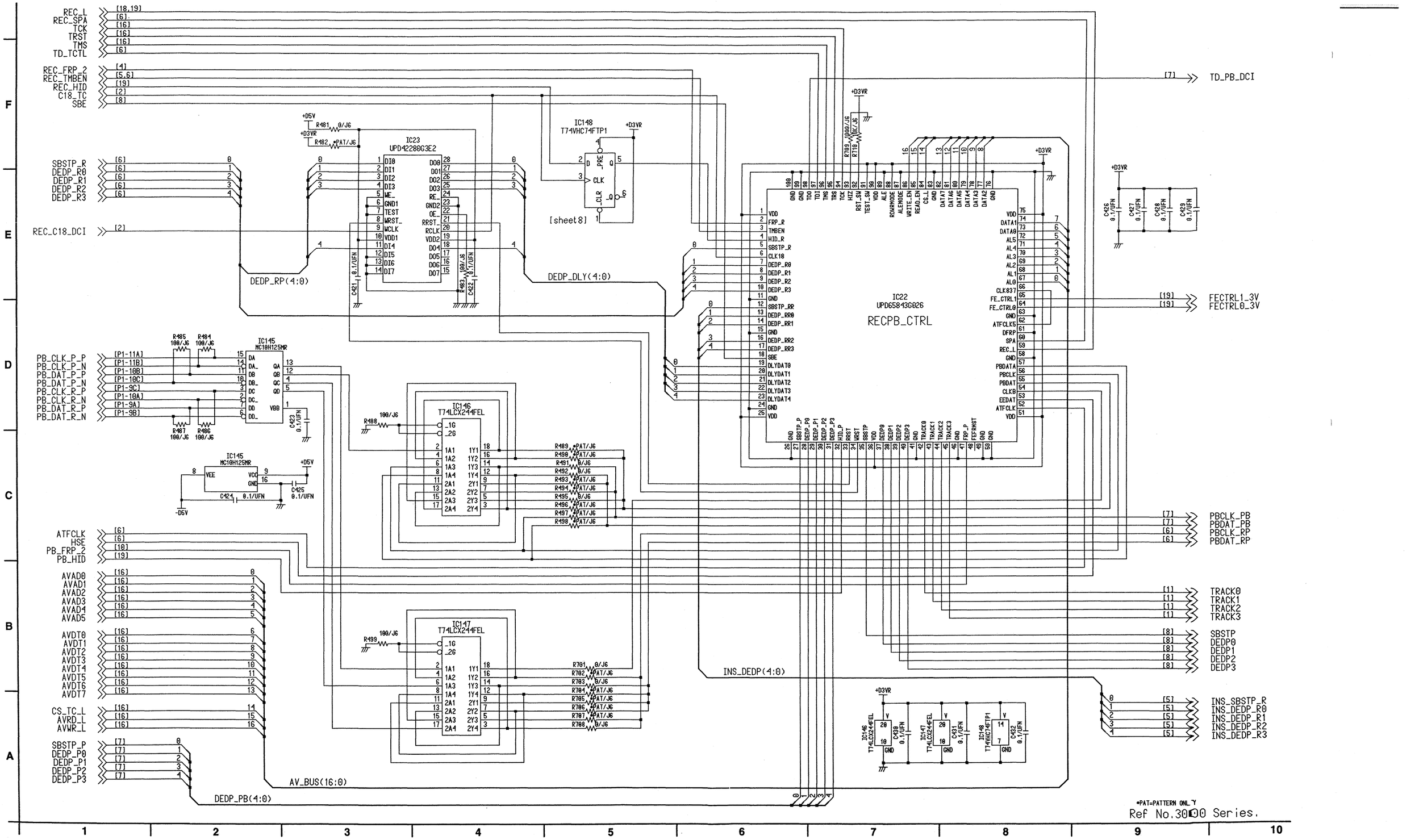


*PAT=PATTERN ONLY

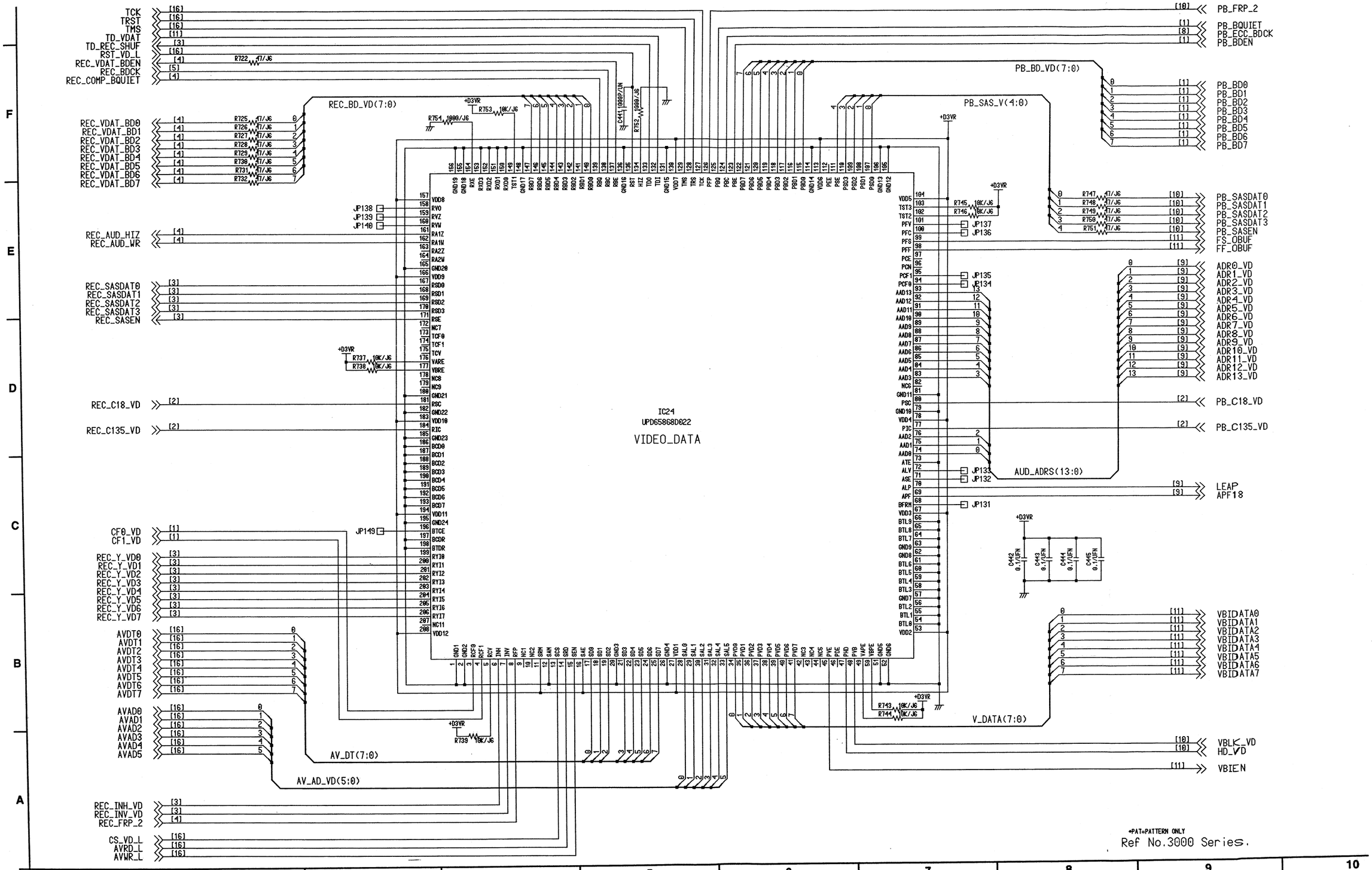
Ref No.3000 Series.

2—73

F5 REC PB 14/23 (REC PB CTRL) SCHEMATIC DIAGRAM

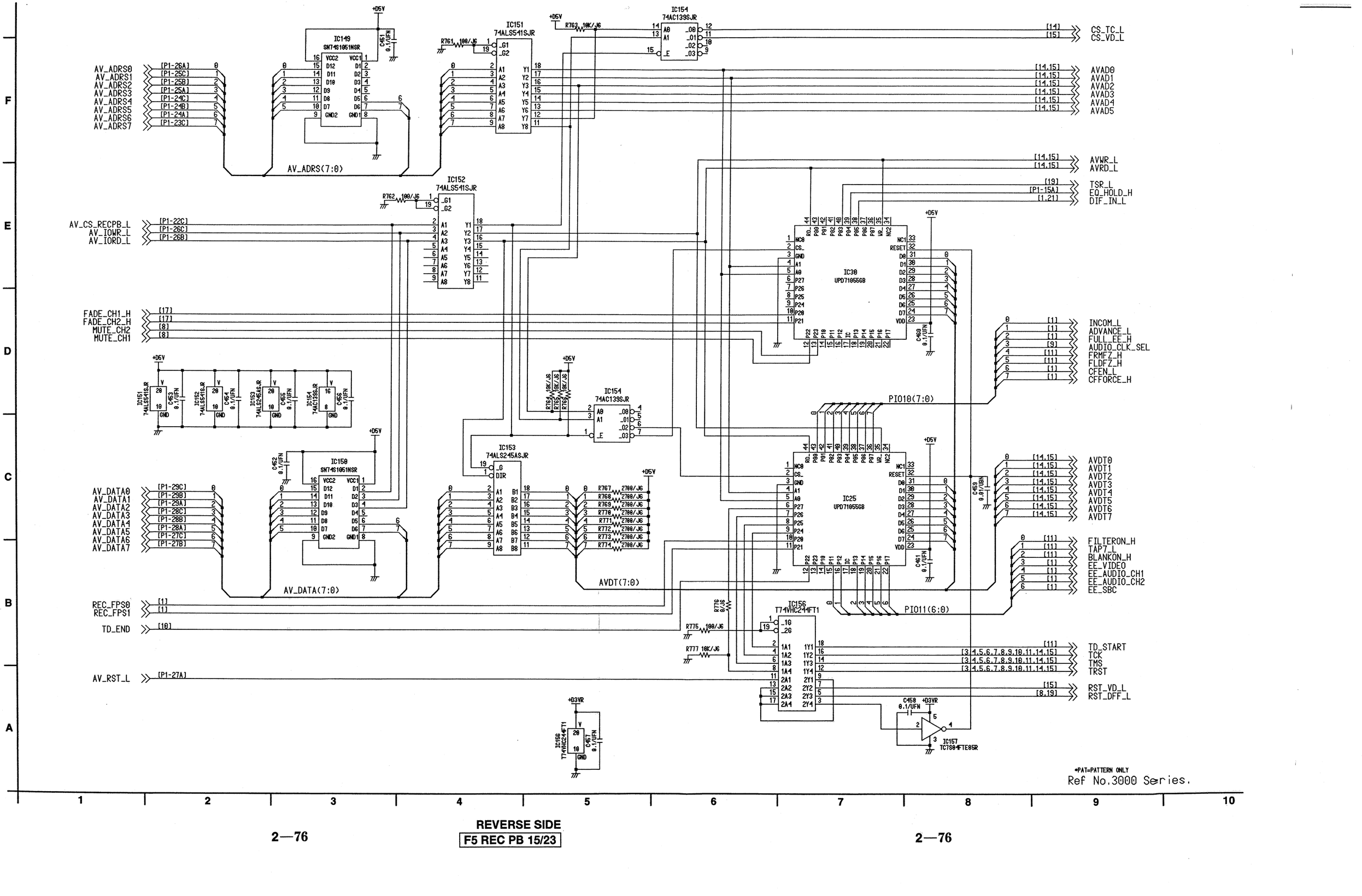


F5 REC PB 15/23 (VIDEO DATA) SCHEMATIC DIAGRAM



2—75

F5 REC PB 16/23 (PIO) SCHEMATIC DIAGRAM

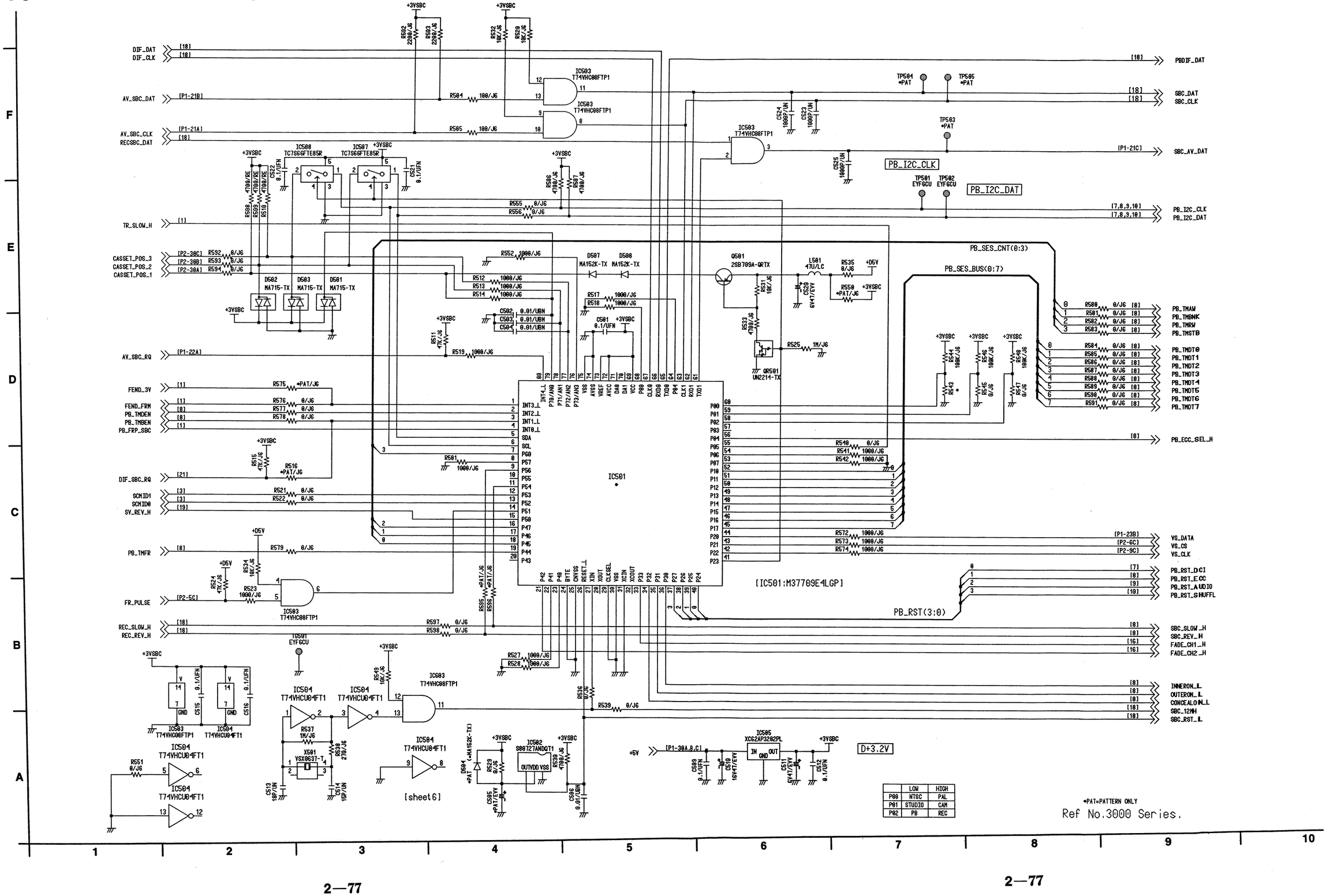


REVERSE SIDE

F5 REC PB 15/23

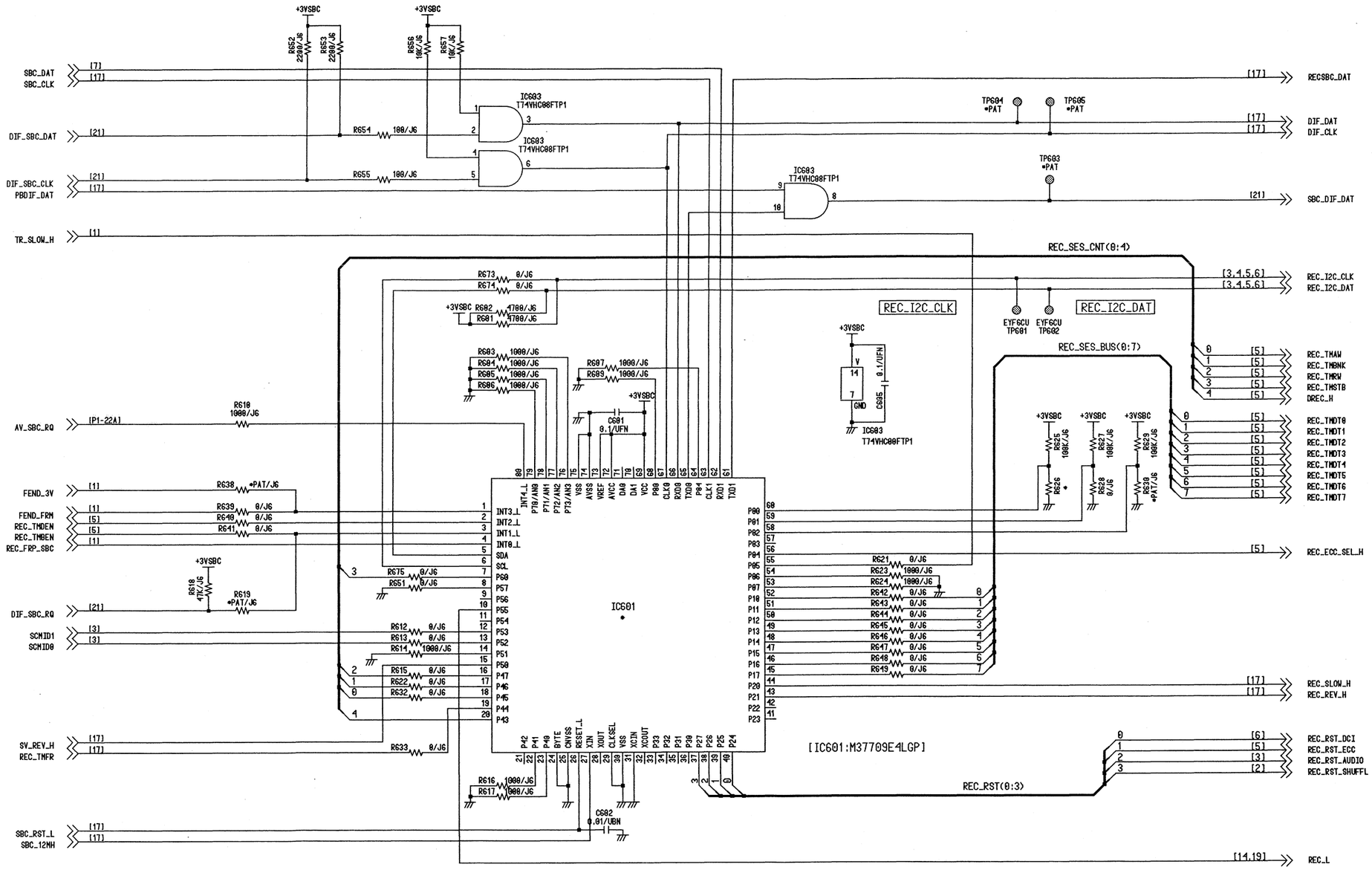
2—76

F5 REC PB 17/23 (SBC PB) SCHEMATIC DIAGRAM



2—77

F5 REC PB 18/23 (SBC REC) SCHEMATIC DIAGRAM

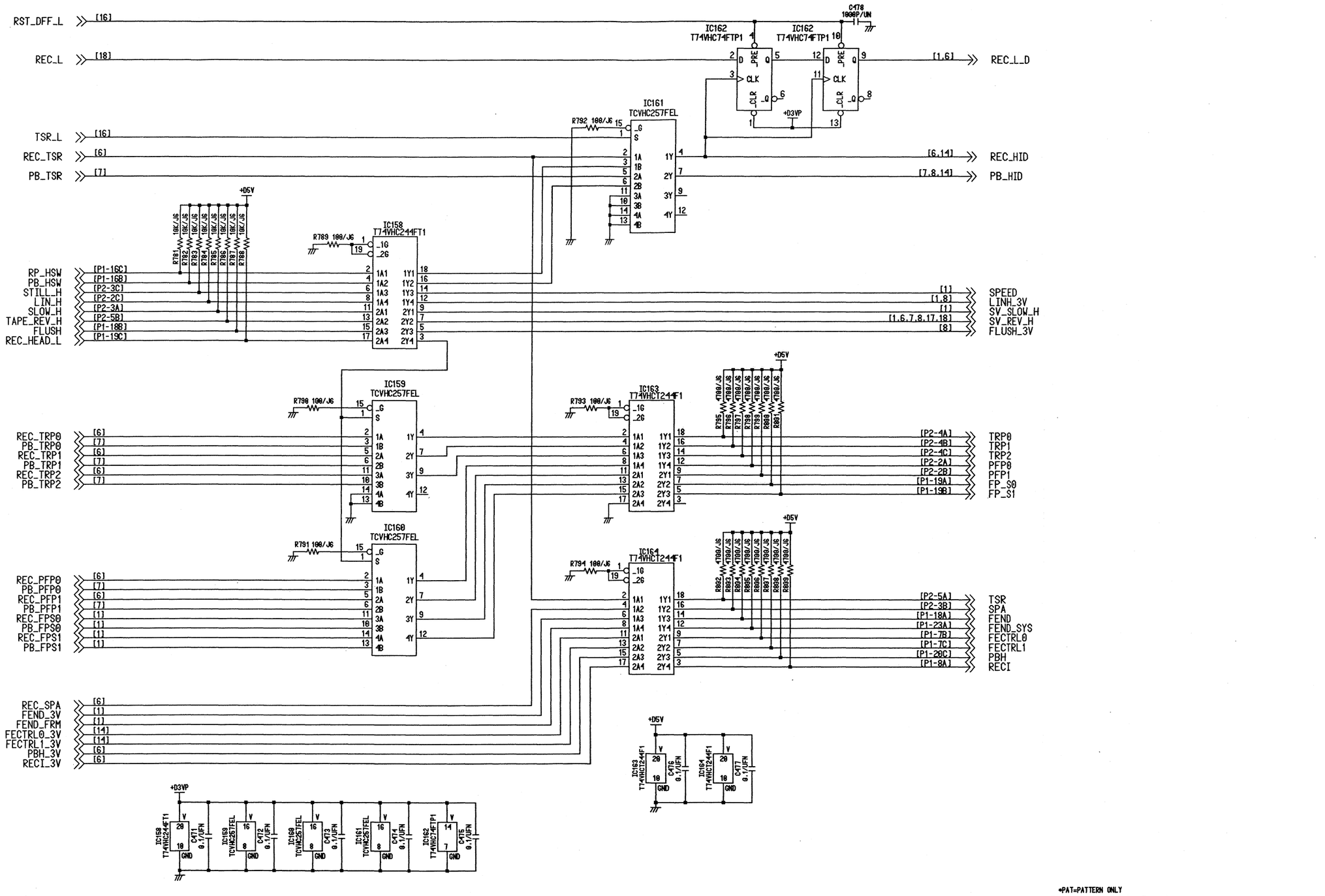


	LOW	HIGH
P00	NTSC	PAL
P01	STUDIO	CAM
P02	PB	REC

*PAT=PATTERN ONLY

Ref No.3000 Series.

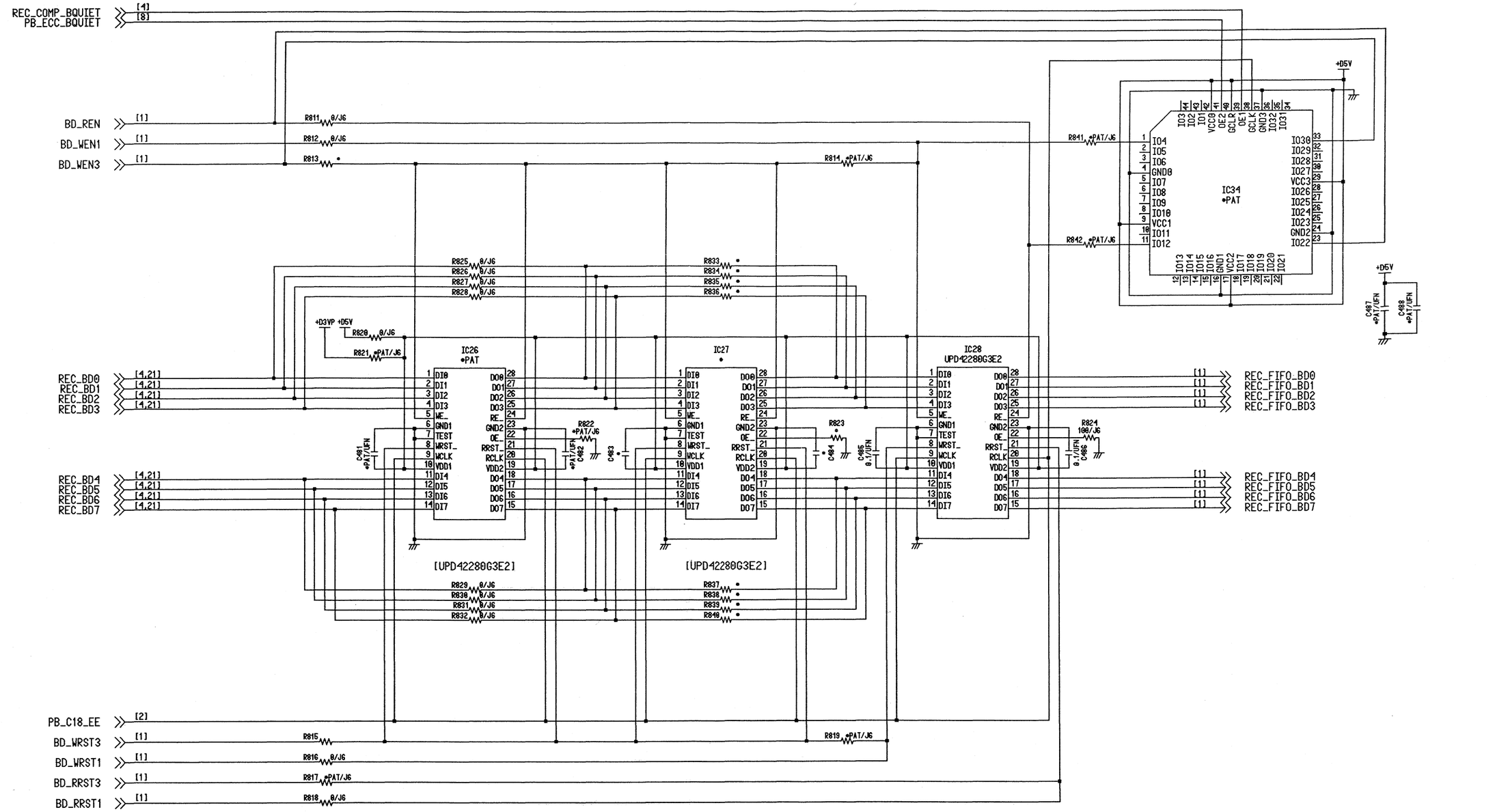
F5 REC PB 19/23 (SERVO SEPA) SCHEMATIC DIAGRAM



*PAT=PATTERN ONLY
Ref No.3000 Series.

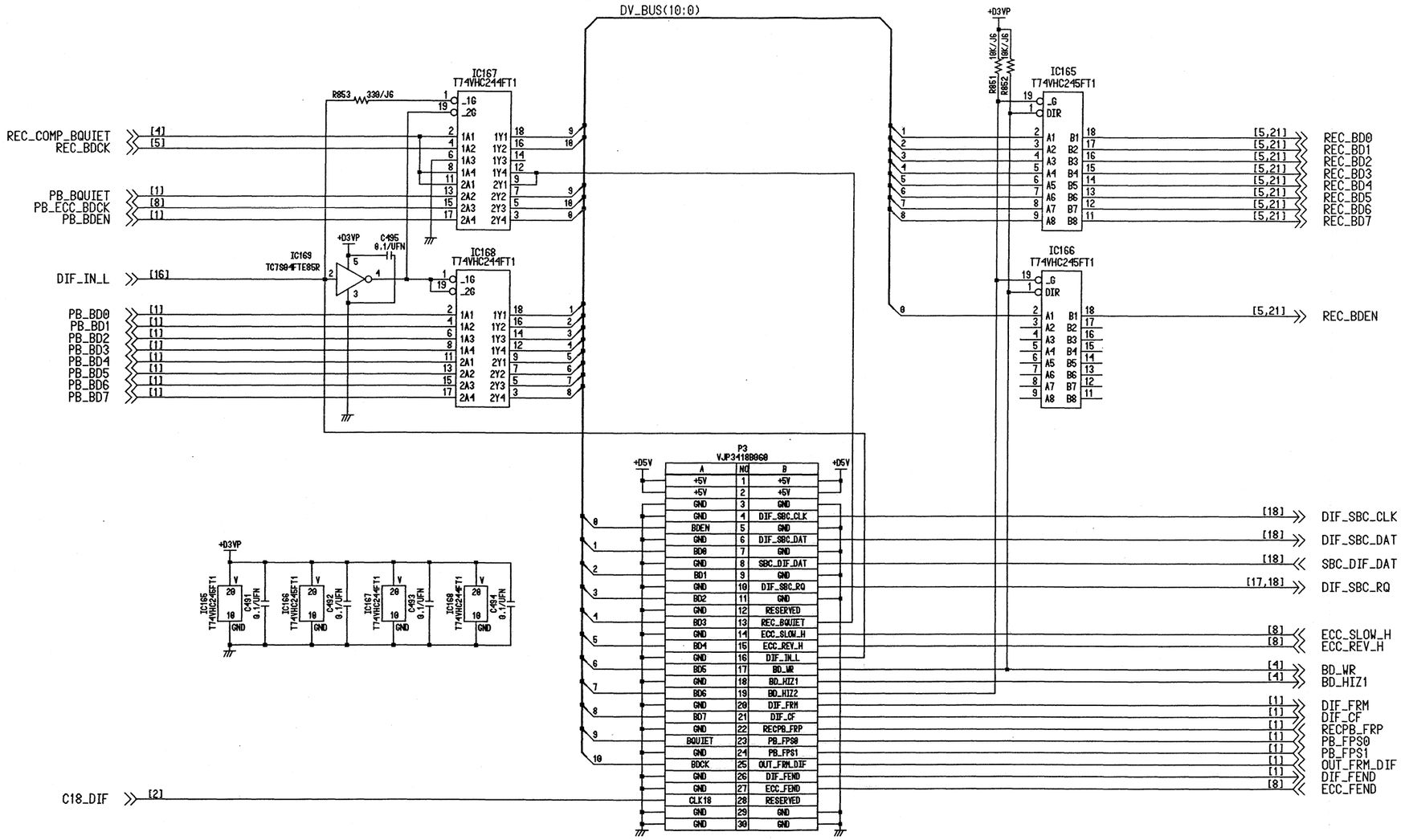
2—79

F5 REC PB 20/23 (DVC RETURN) SCHEMATIC DIAGRAM



*PAT=PATTERN ONLY
Ref No.3000 Series.

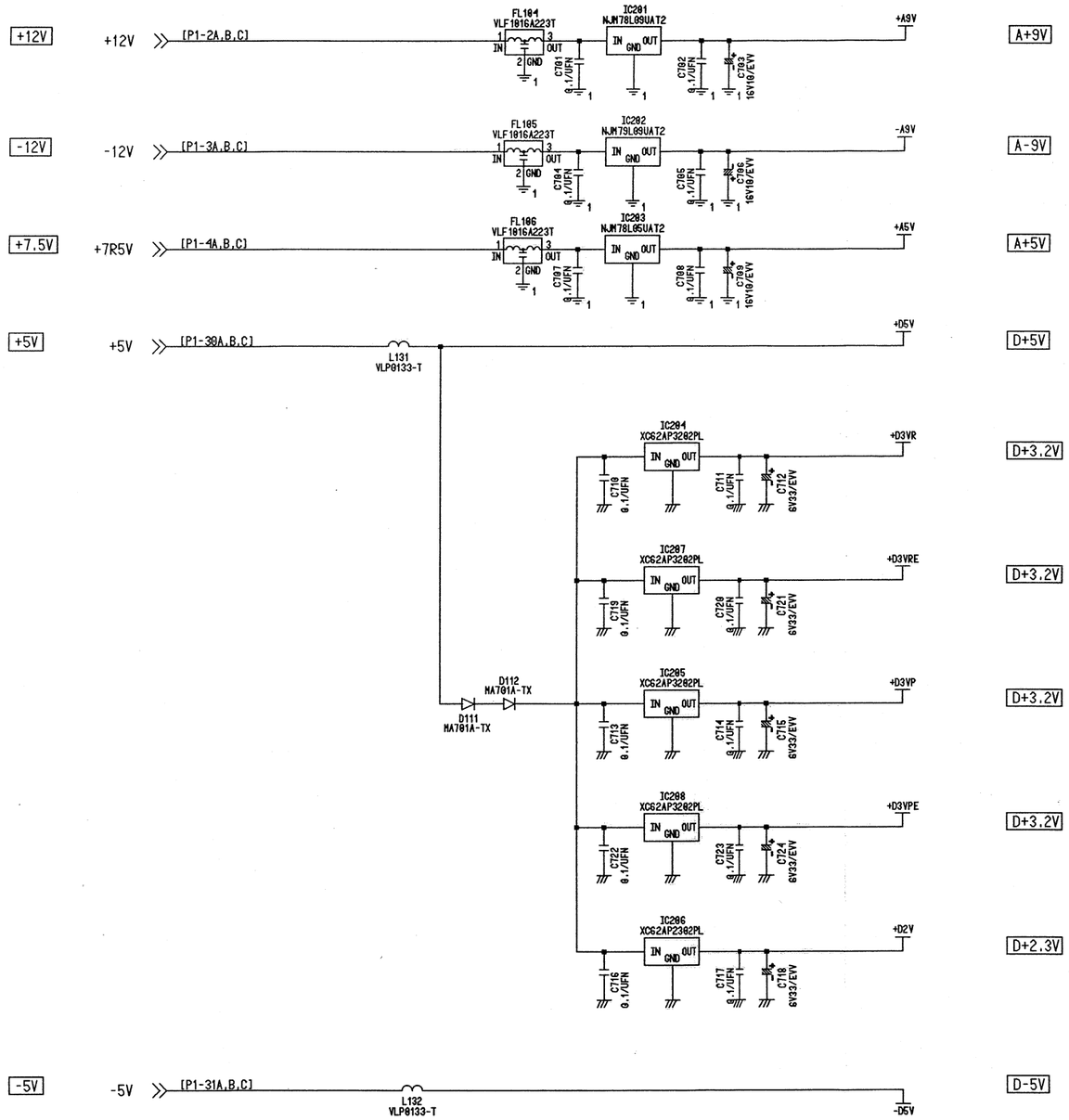
F5 REC PB 21/23 (DIF) SCHEMATIC DIAGRAM



*PAT=PATTERN ONLY
Ref No.3000 Series.

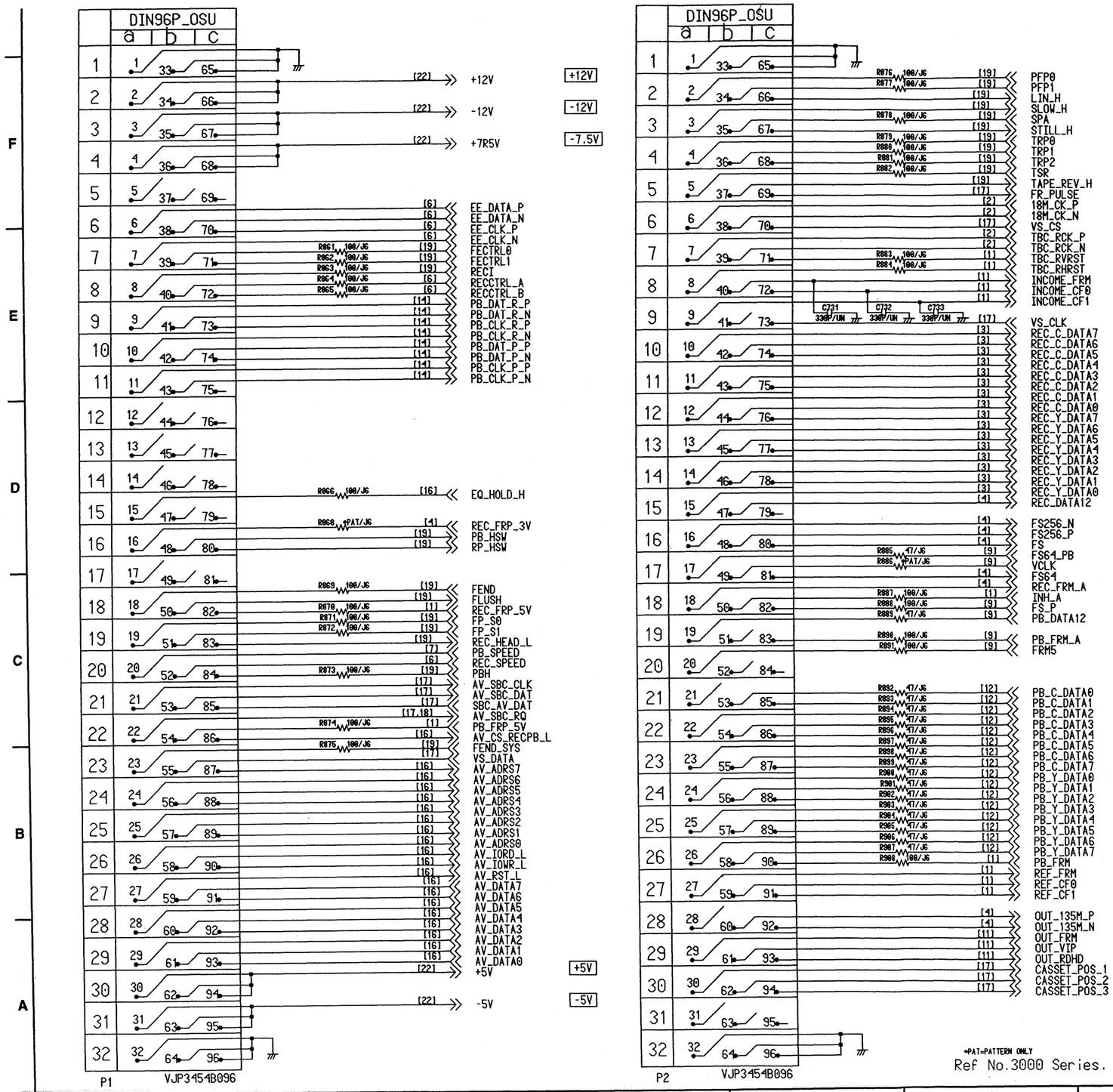
2—81

F5 REC PB 22/23 (POWER) SCHEMATIC DIAGRAM



*PAT=PATTERN ONLY
Ref No.3000 Series.

F5 REC PB 23/23 (MOTHER) SCHEMATIC DIAGRAM AND COMPARISON CHART

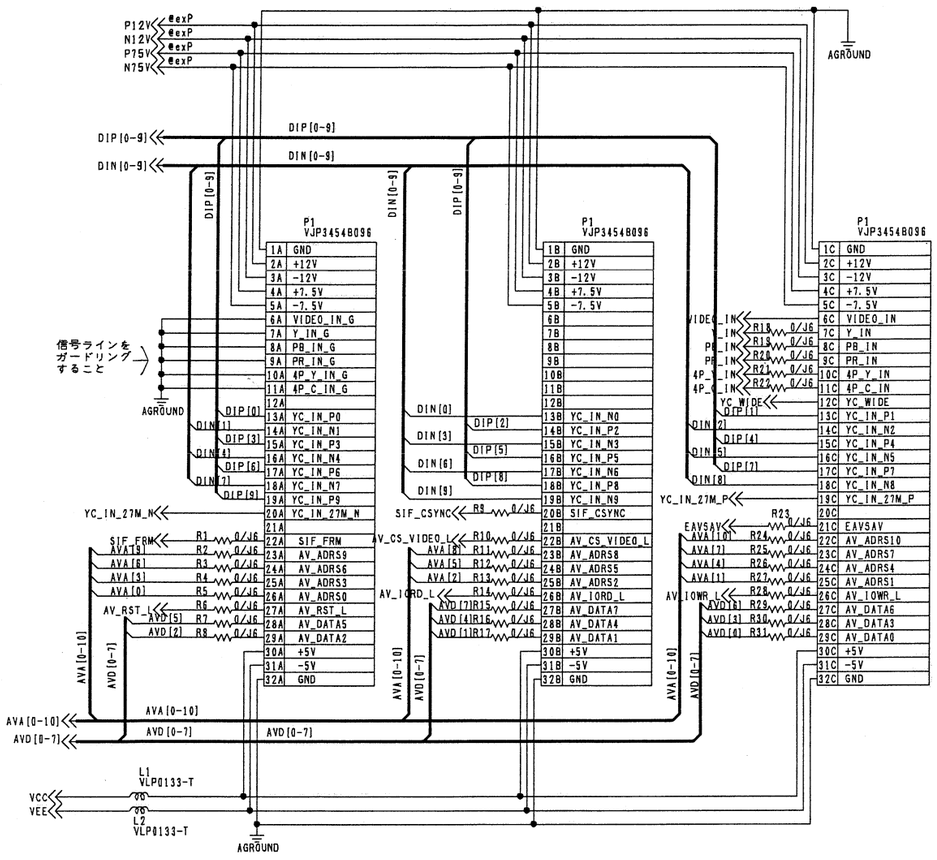


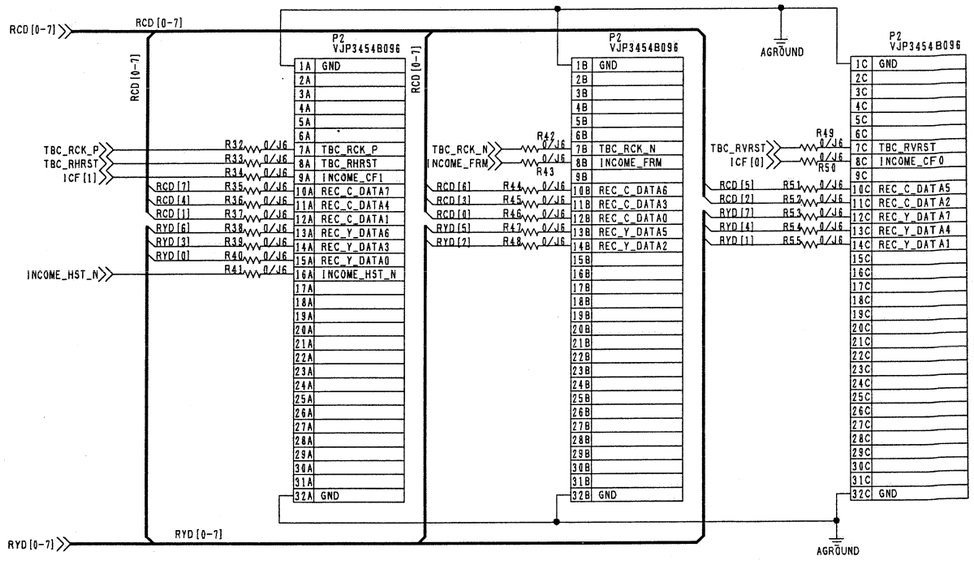
COMPARISON CHART

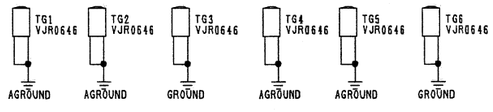
REF	NTSC	PAL	REF	NTSC	PAL
C109	*PAT/UFN	0.1/UFN	R425	*PAT/J6	1000/J6
C363	*PAT/UFN	0.1/UFN	R426	*PAT/J6	1000/J6
C364	*PAT/UFN	0.1/UFN	R427	*PAT/J6	1000/J6
C365	*PAT/UFN	0.1/UFN	R428	*PAT/J6	10K/J6
C366	*PAT/UFN	0.1/UFN	R429	*PAT/J6	1000/J6
C371	*PAT/UFN	0.1/UFN	R430	*PAT/J6	1000/J6
C401	*PAT/UN	33P/UN	R431	*PAT/J6	1000/J6
C402	*PAT/UN	15P/UN	R432	0/J6	*PAT/J6
C403	*PAT/UFN	0.1/UFN	R433	0/J6	*PAT/J6
C404	*PAT/UFN	0.1/UFN	R438	0/J6	*PAT/J6
C405	*PAT/UFN	0.1/UFN	R439	0/J6	*PAT/J6
C406	*PAT/UFN	0.1/UFN	R440	0/J6	*PAT/J6
C407	*PAT/UFN	0.1/UFN	R441	0/J6	*PAT/J6
C408	*PAT/UFN	0.1/UFN	R442	0/J6	*PAT/J6
C409	*PAT/UFN	0.1/UFN	R443	0/J6	*PAT/J6
C410	*PAT/UFN	0.1/UFN	R444	0/J6	*PAT/J6
C411	*PAT/UFN	0.1/UFN	R445	0/J6	*PAT/J6
C412	*PAT/UFN	0.1/UFN	R446	0/J6	*PAT/J6
C483	*PAT/UFN	0.1/UFN	R447	0/J6	*PAT/J6
C484	*PAT/UFN	0.1/UFN	R448	0/J6	*PAT/J6
IC137	*PAT	TCVHC164FEL	R449	0/J6	*PAT/J6
IC138	*PAT	T74VHC74FTP1	R450	0/J6	*PAT/J6
IC139	*PAT	TCVHC02FEL	R451	0/J6	*PAT/J6
IC140	*PAT	TC7S00FTE85R	R452	0/J6	*PAT/J6
IC171	*PAT	TC7S04FTE85R	R453	0/J6	*PAT/J6
IC172	*PAT	TC7S32FTE85R	R454	*PAT/J6	10K/J6
IC17	MN4706F	MN4707F	R455	1000/J6	*PAT/J6
IC27	*PAT	UPD42280G3E2	R471	*PAT/J6	0/J6
IC35	*PAT	CG25123-5106	R472	*PAT/J6	270/J6
IC36	*PAT	CY7C19920ZC	R473	*PAT/J6	100/J6
IC37	*PAT	CY7C19920ZC	R543	0/J6	*PAT/J6
IC4	MN4706F	MN4707F	R626	0/J6	*PAT/J6
IC501	VSI2159B	VSI2282	R813	*PAT/J6	0/J6
IC601	VSI2159B	VSI2282	R815	*PAT/J6	0/J6
R119	*PAT/J6	10K/J6	R823	*PAT/J6	100/J6
R120	1000/J6	*PAT/J6	R833	0/J6	*PAT/J6
R121	*PAT/J6	0/J6	R834	0/J6	*PAT/J6
R122	0/J6	*PAT/J6	R835	0/J6	*PAT/J6
R381	0/J6	*PAT/J6	R836	0/J6	*PAT/J6
R421	47/J6	*PAT/J6	R837	0/J6	*PAT/J6
R422	*PAT/J6	0/J6	R838	0/J6	*PAT/J6
R423	1000/J6	*PAT/J6	R839	0/J6	*PAT/J6
R424	*PAT/J6	1000/J6	R840	0/J6	*PAT/J6

2—83

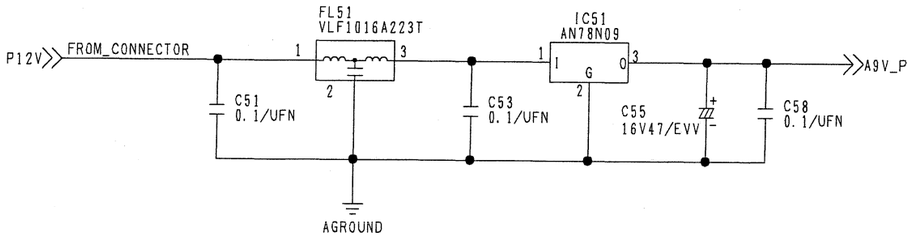
F6 V IN 1/18 (CONNECTOR) SCHEMATIC DIAGRAM

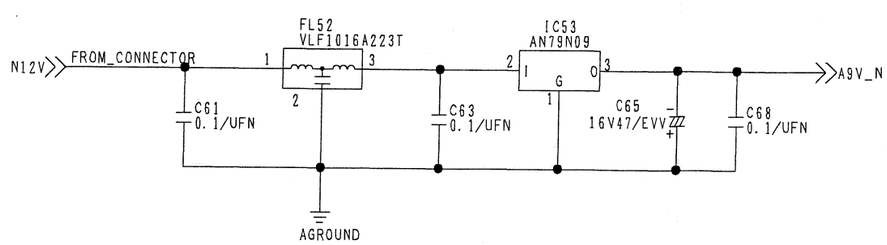


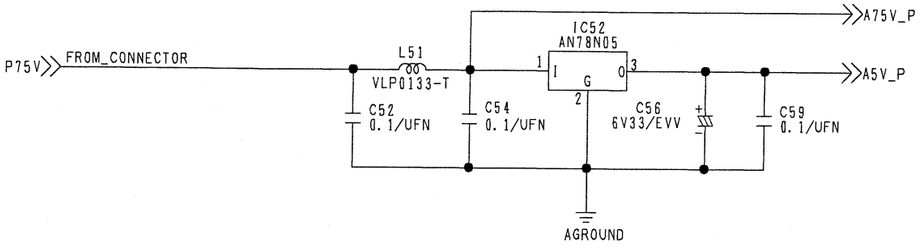


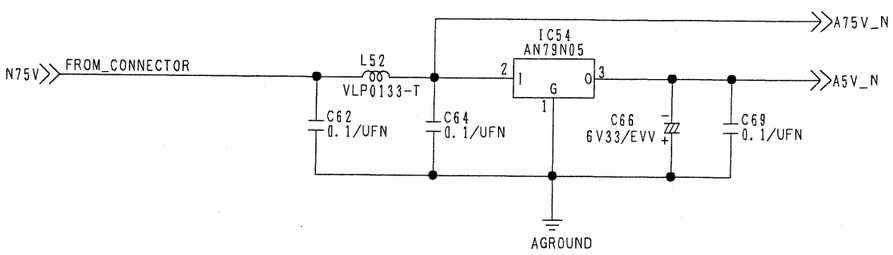


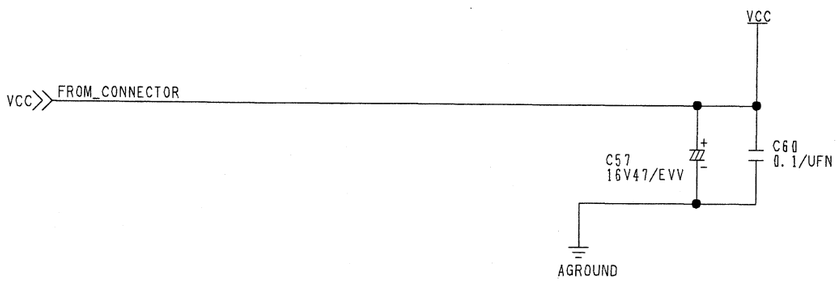
F6 V IN 2/18 (POWER) SCHEMATIC DIAGRAM

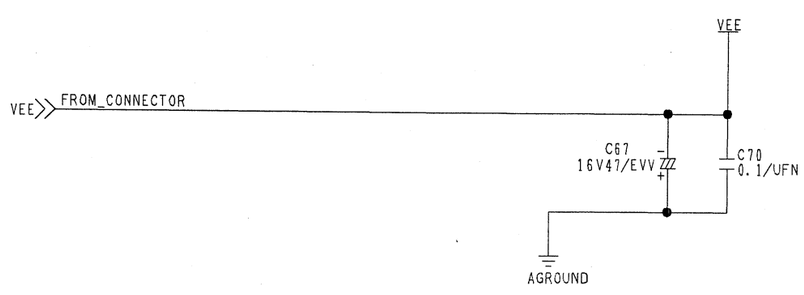






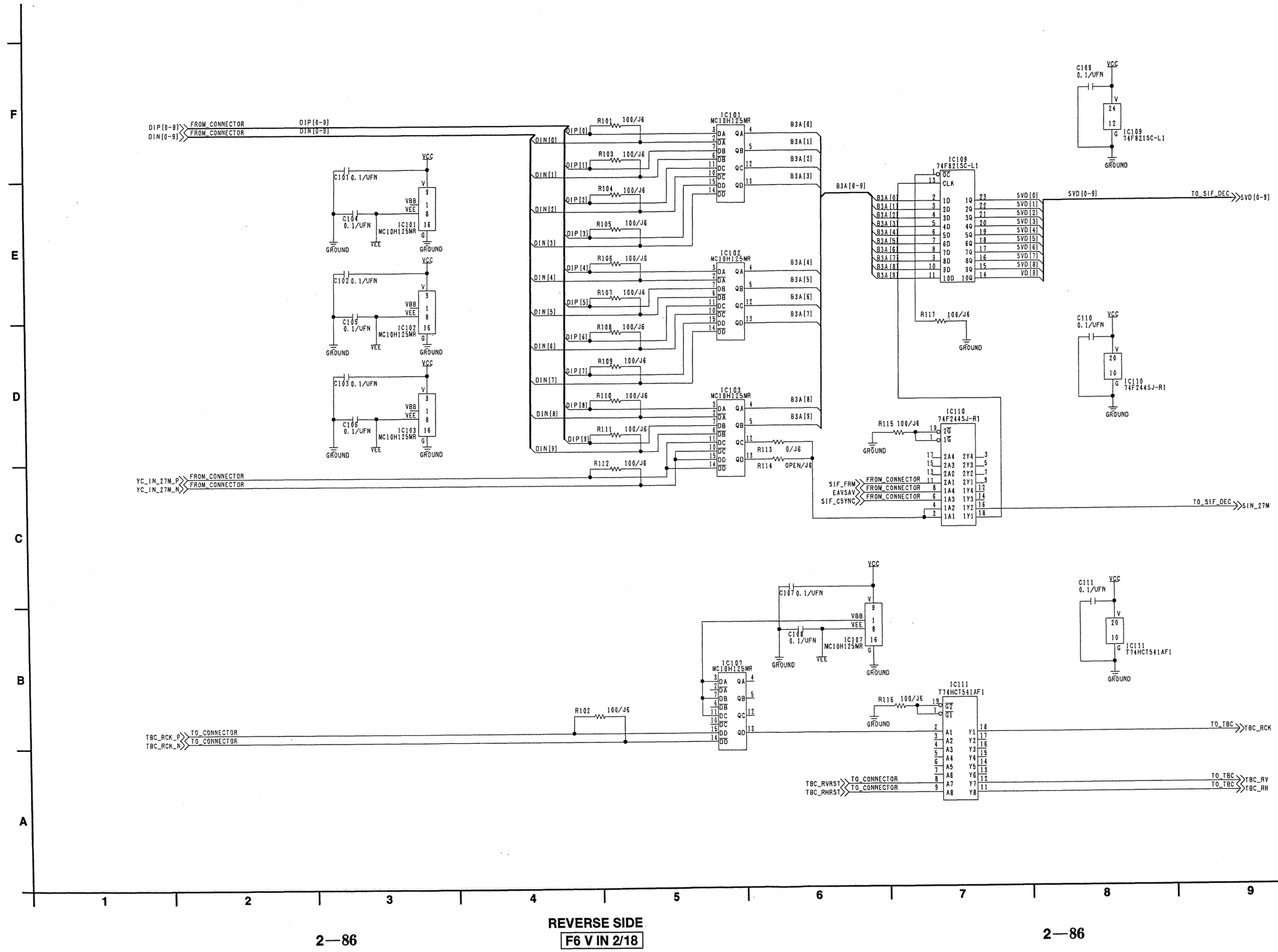






2—85

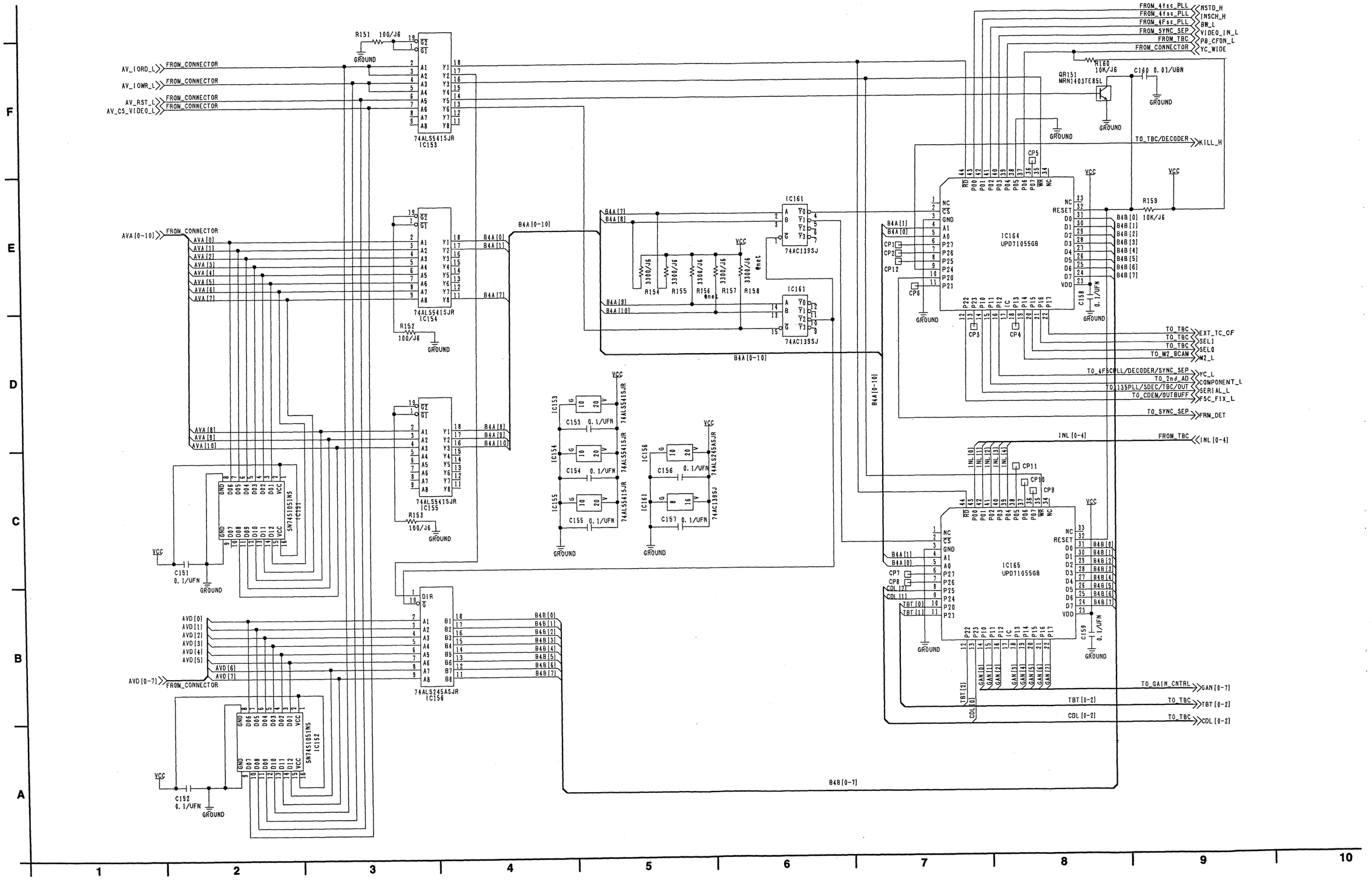
F6 V IN 3/18 (IN BUFF) SCHEMATIC DIAGRAM



REVERSE SIDE
F6 V IN 2/18

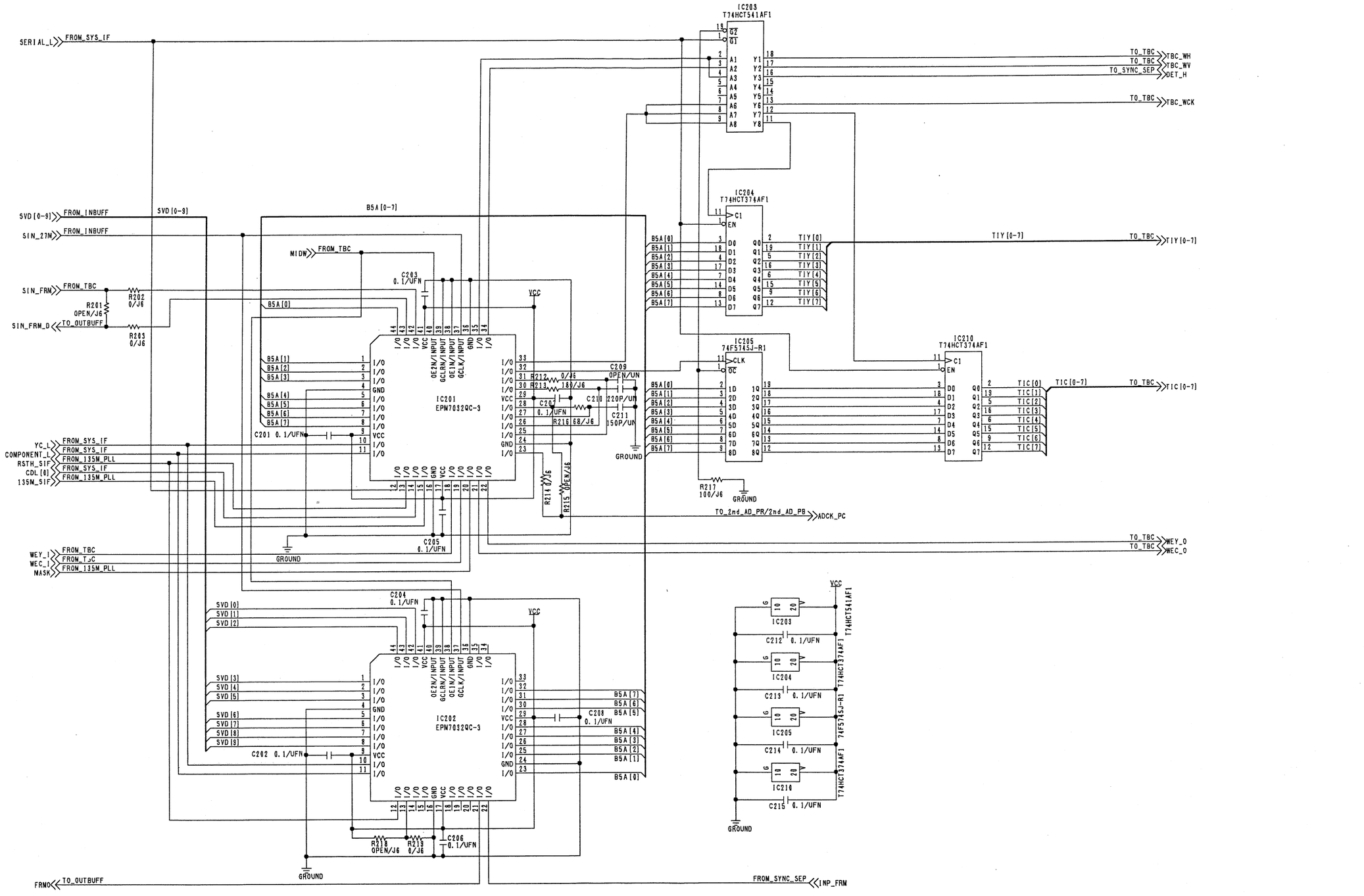
2—86

F6 V IN 4/18 (SYS IF) SCHEMATIC DIAGRAM

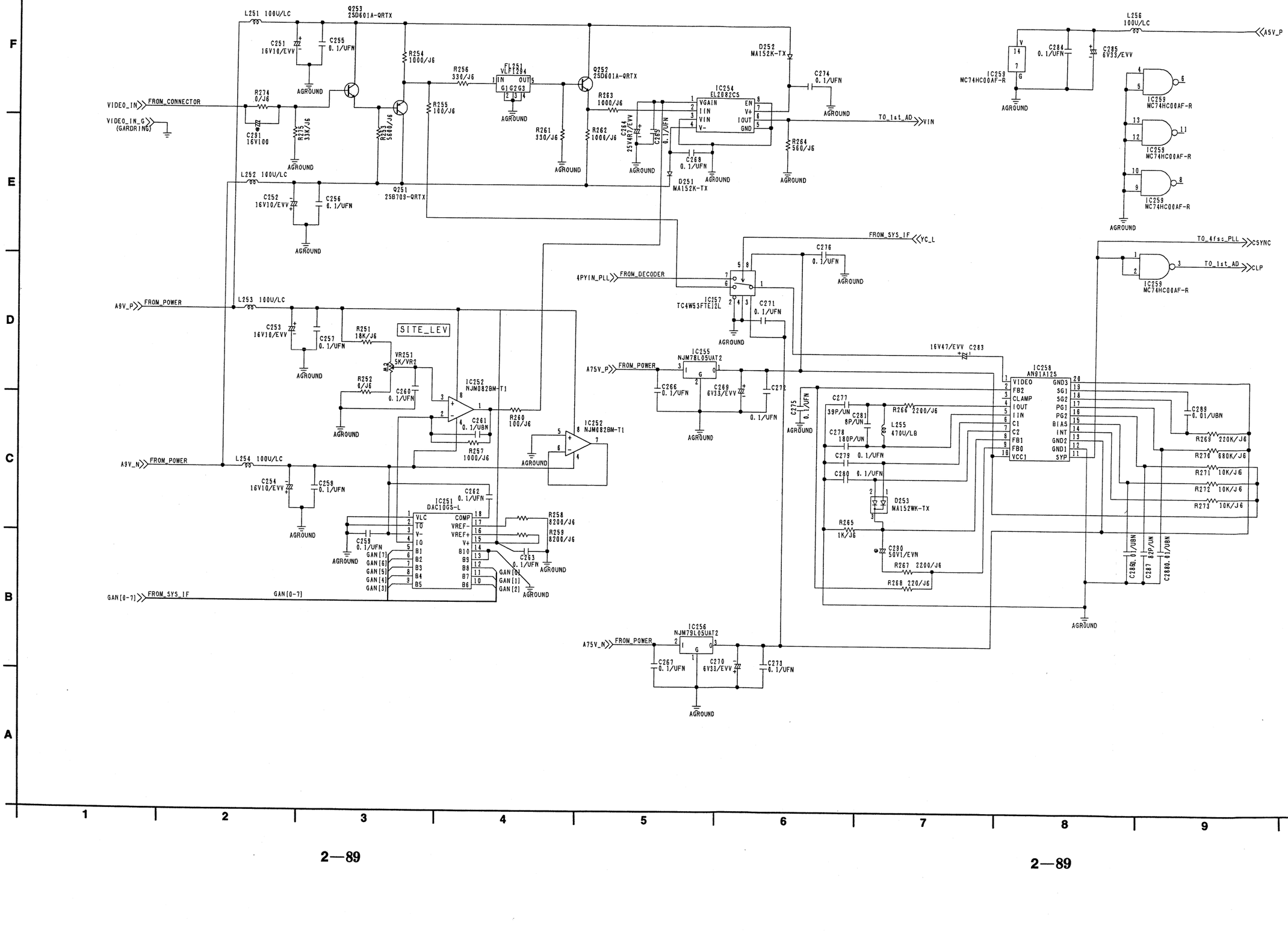


2—87

F6 V IN 5/18 (SIF DEC) SCHEMATIC DIAGRAM

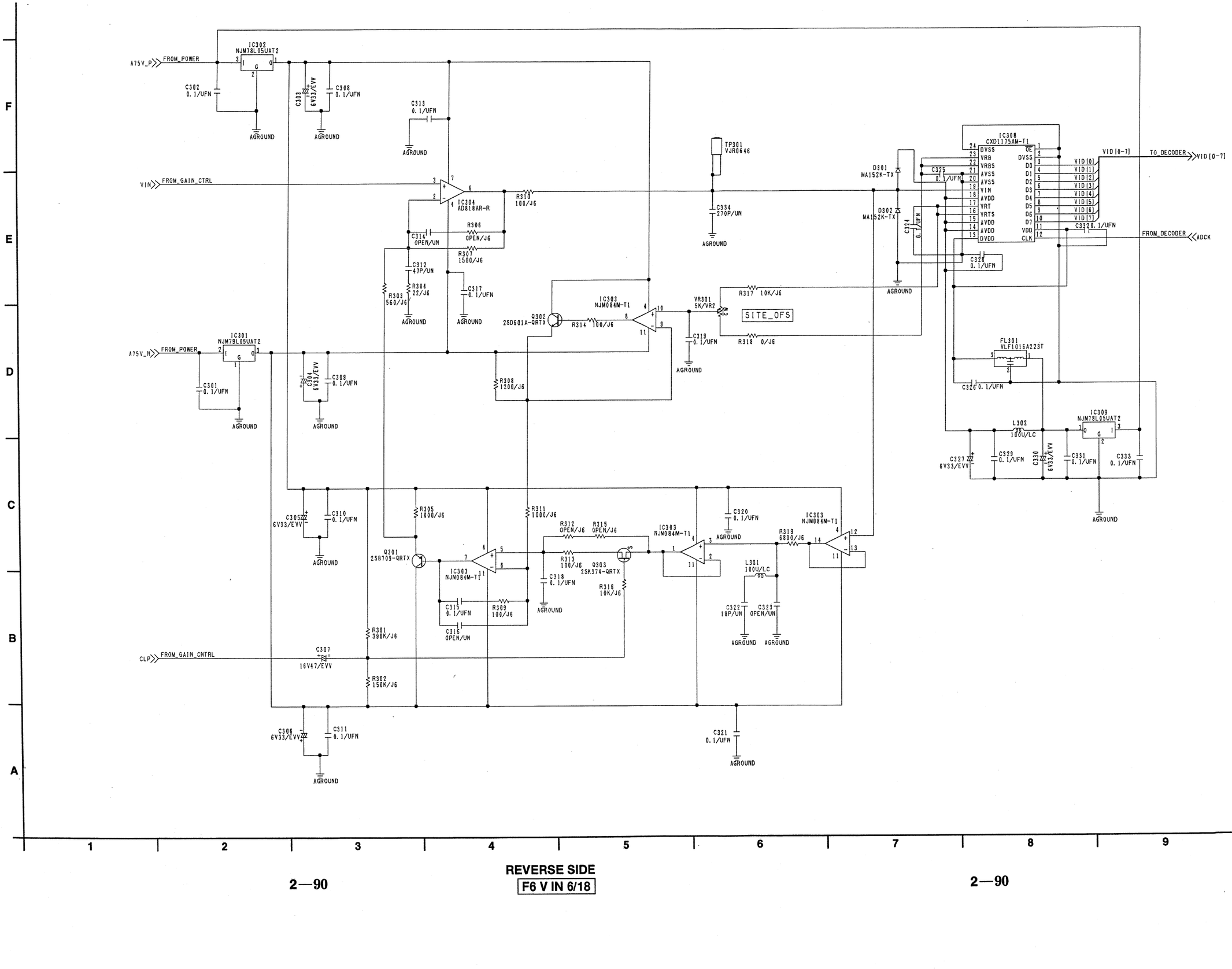


F6 V IN 6/18 (GAIN CNTRL) SCHEMATIC DIAGRAM

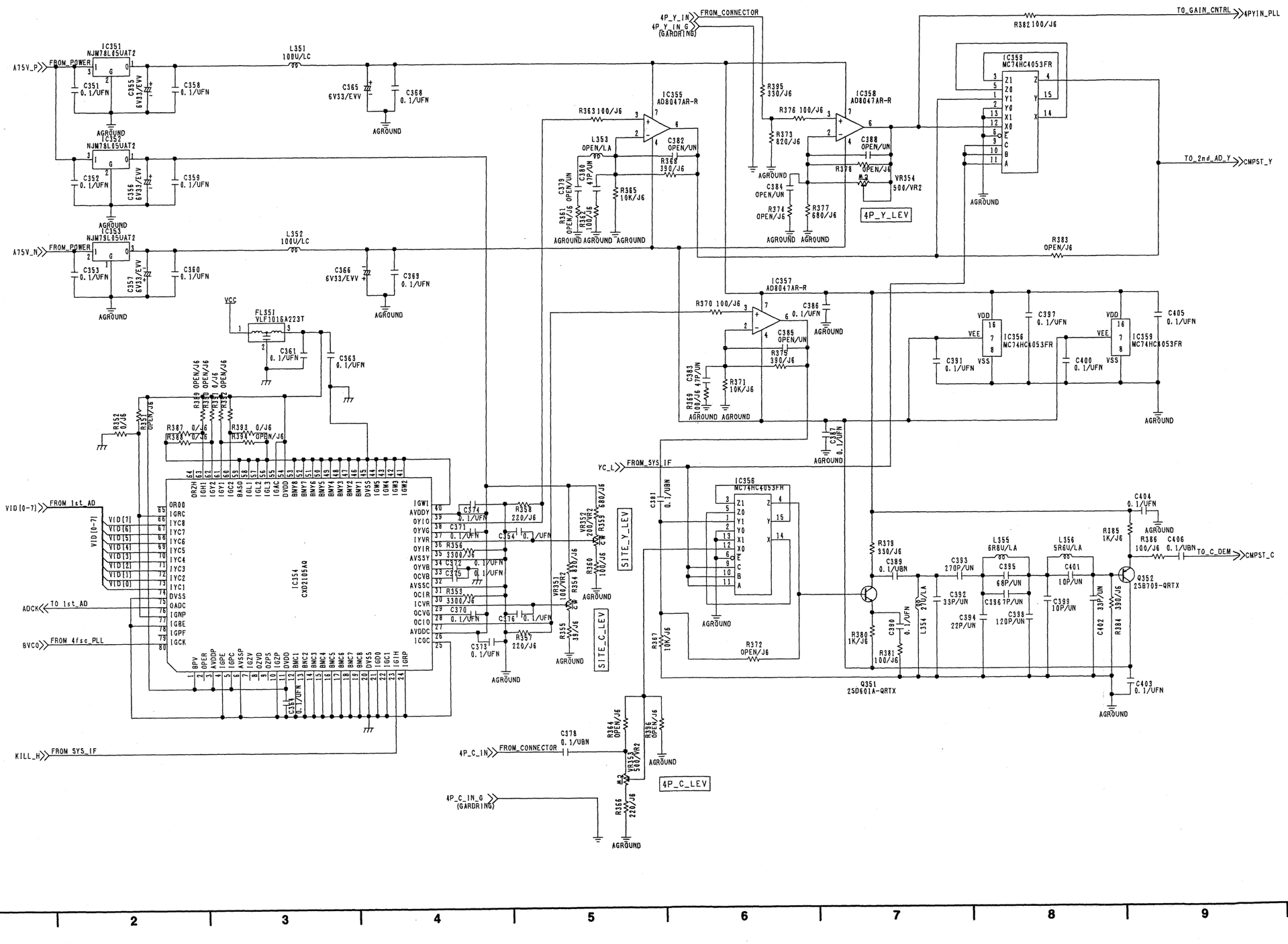


2—89

F6 V IN 7/18 (1st AD) SCHEMATIC DIAGRAM

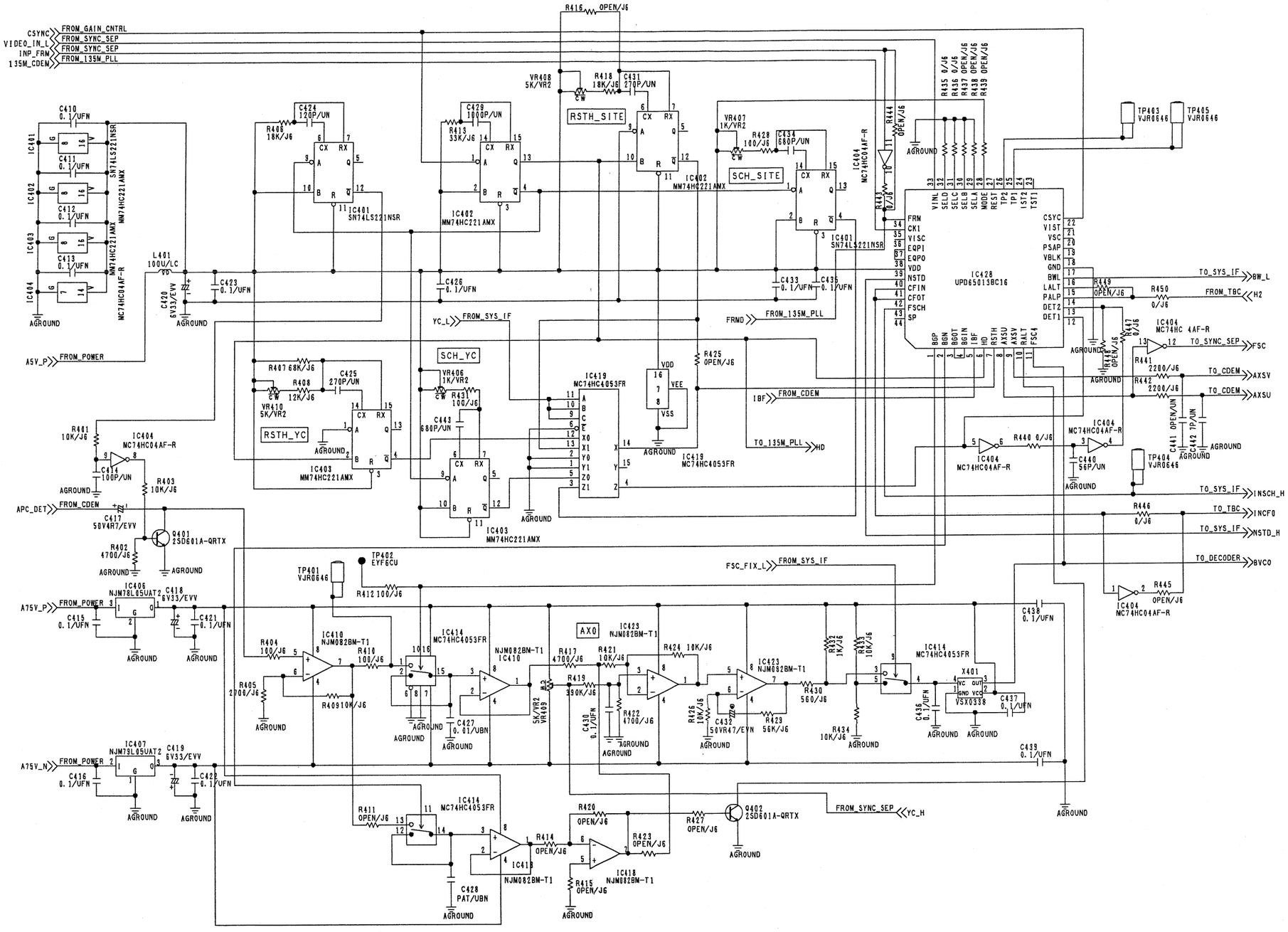


F6 V IN 8/18 (DECODER) SCHEMATIC DIAGRAM



2—91

F6 V IN 9/18 (4FSC PLL) SCHEMATIC DIAGRAM

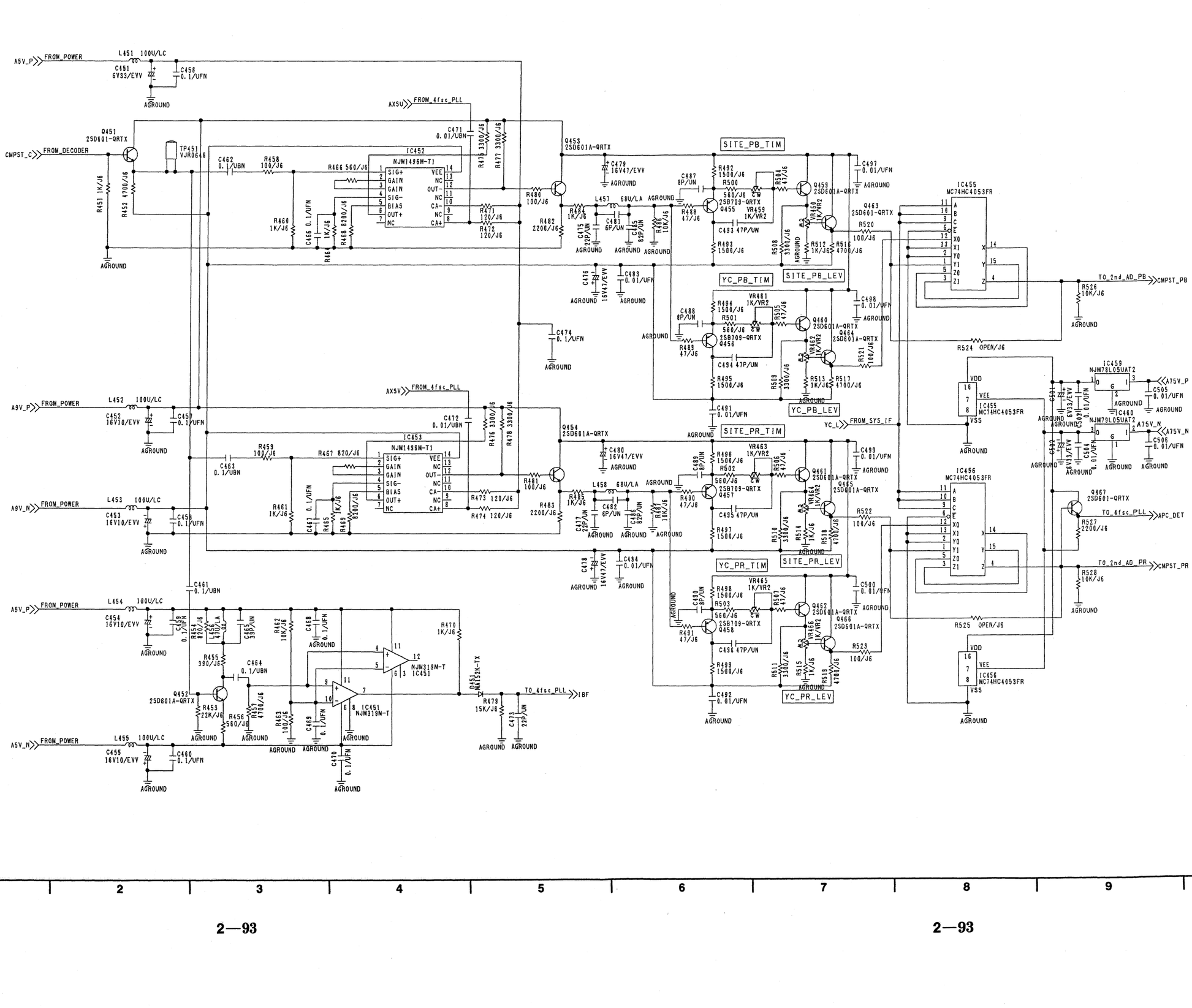


REVERSE SIDE

F6 V IN 8/18

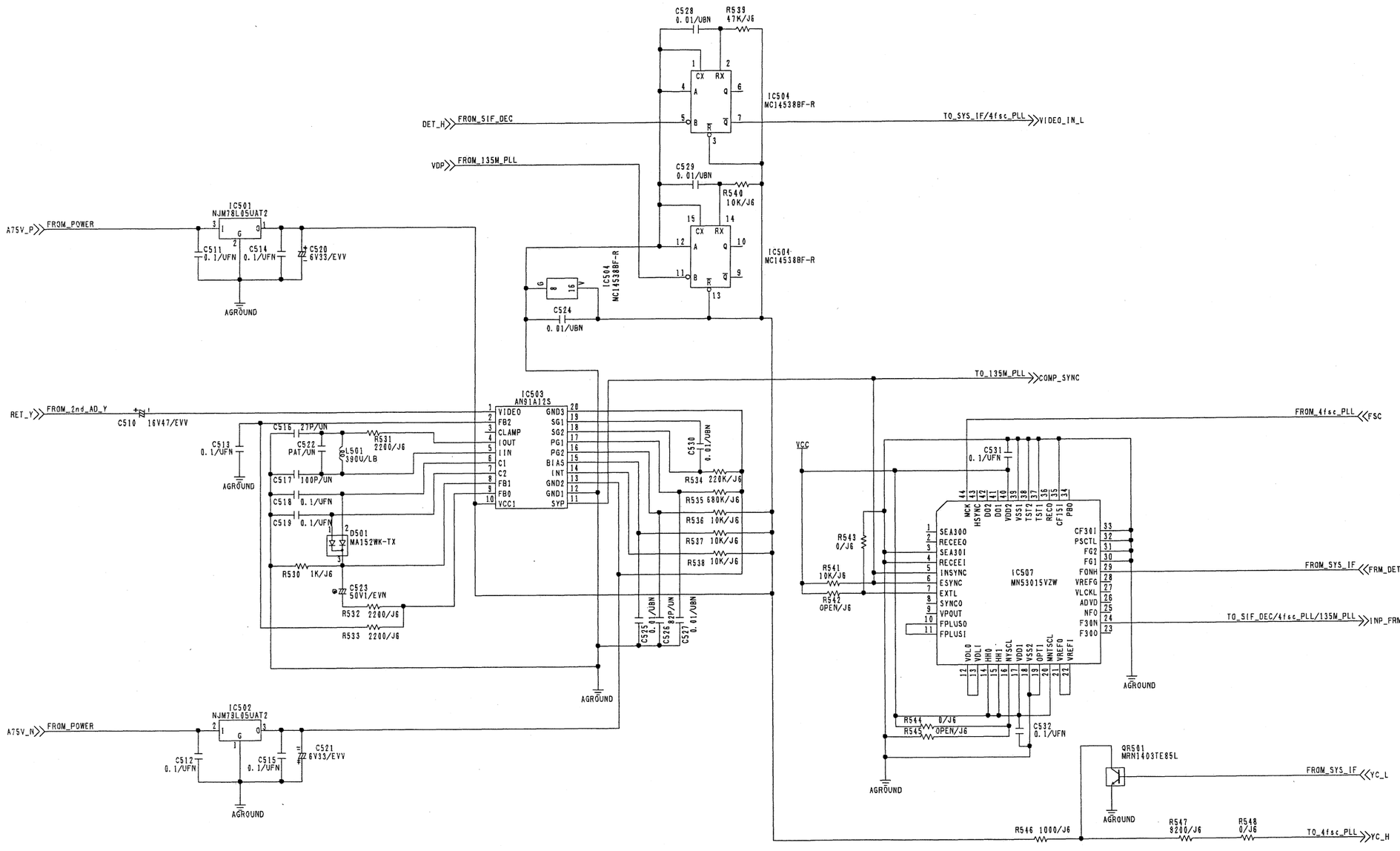
2—92

F6 V IN 10/18 (CDEM) SCHEMATIC DIAGRAM

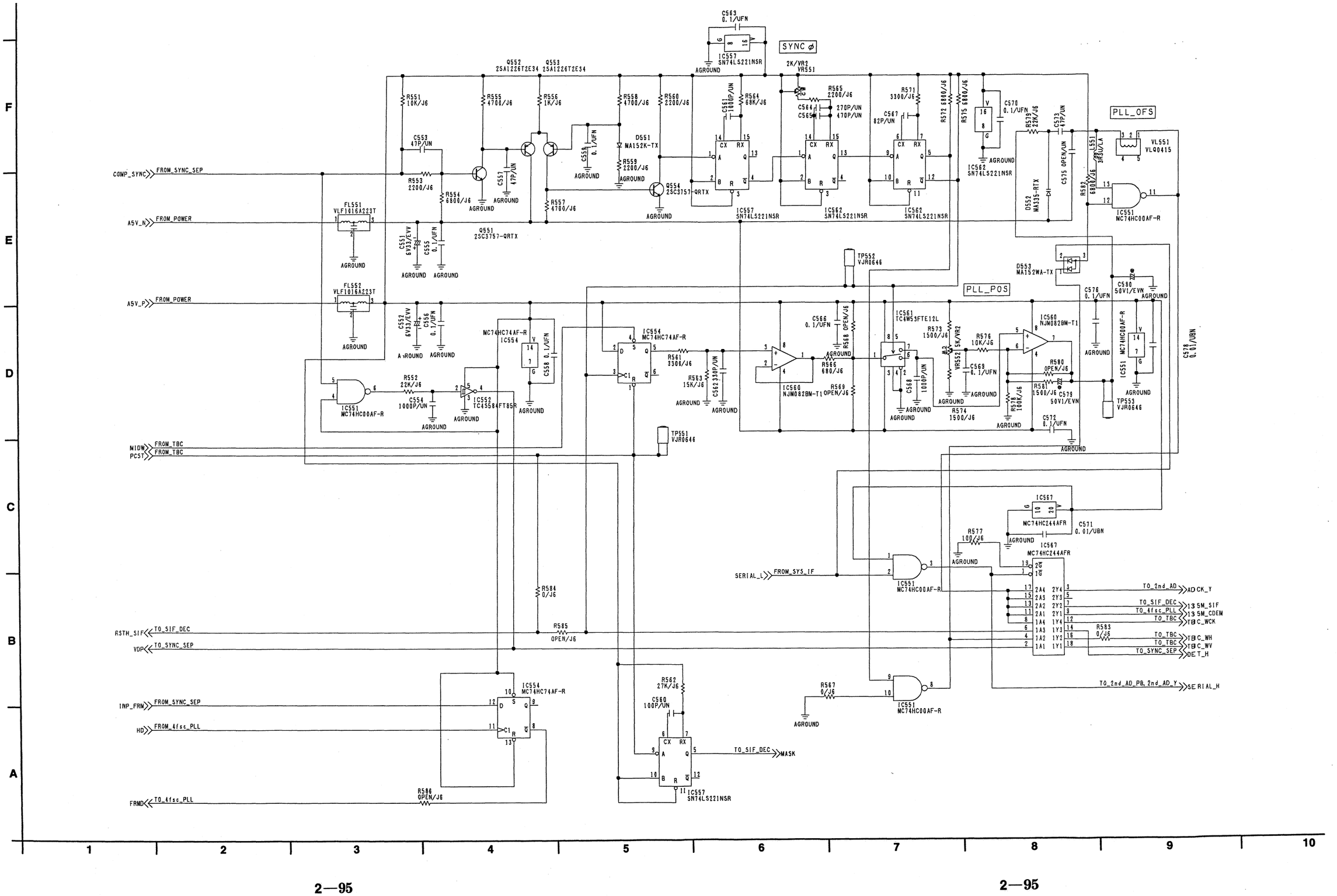


2—93

F6 V IN 11/18 (SYNC SEP) SCHEMATIC DIAGRAM

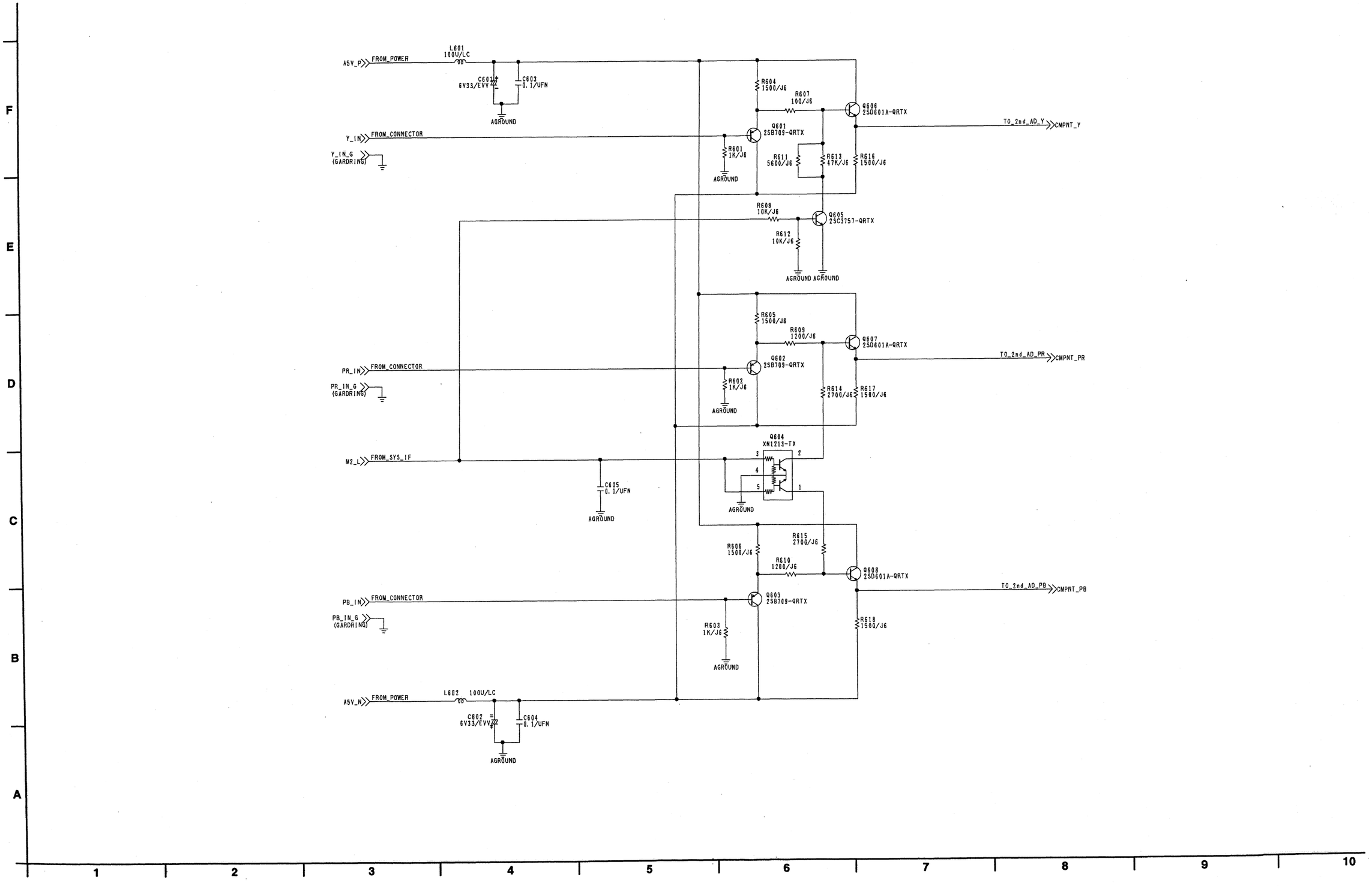


F6 V IN 12/18 (135M PLL) SCHEMATIC DIAGRAM



2—95

F6 V IN 13/18 (M2 BCAM SELECT) SCHEMATIC DIAGRAM

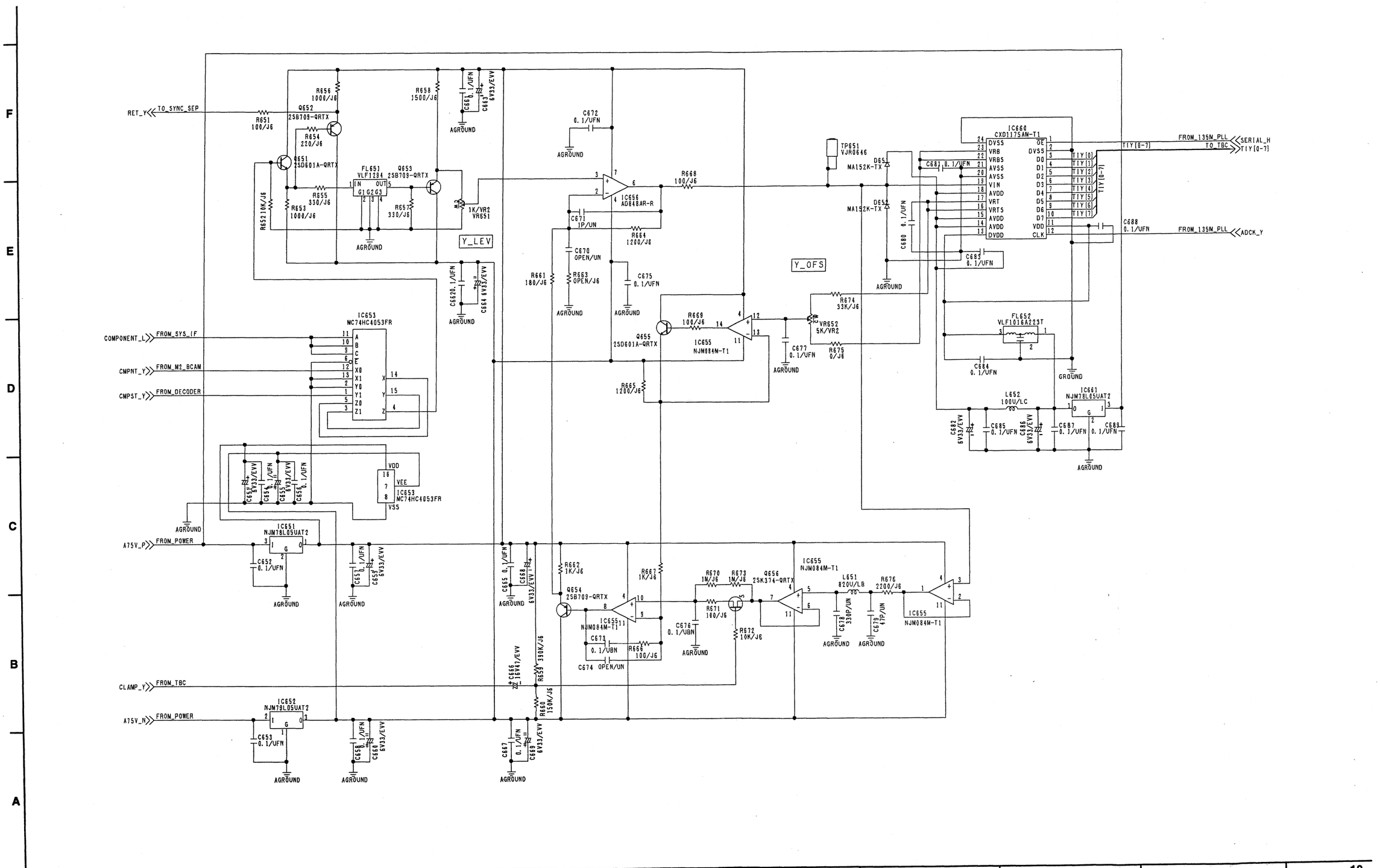


REVERSE SIDE

F6 V IN 12/18

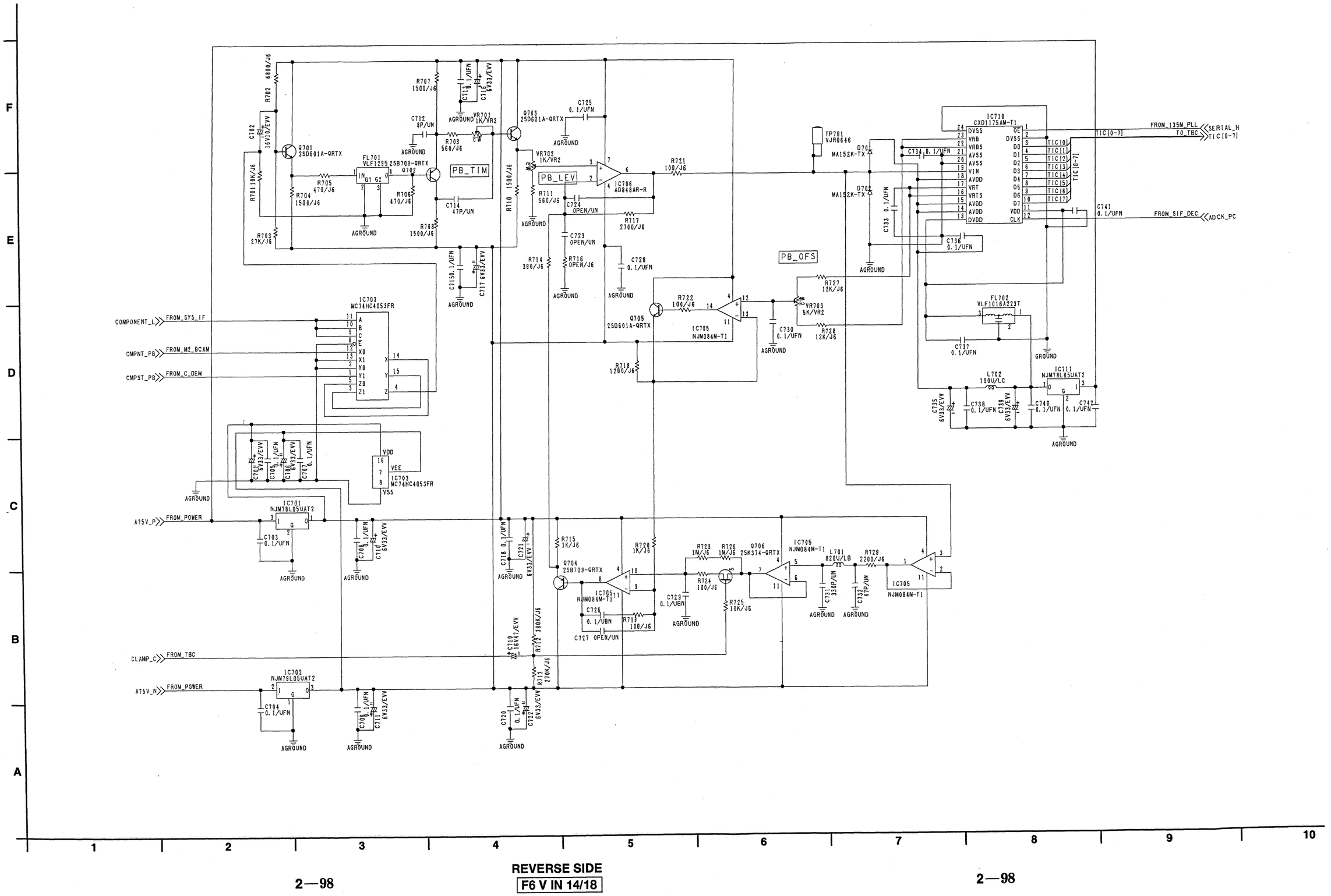
2—96

F6 V IN 14/18 (2nd AD Y) SCHEMATIC DIAGRAM



2—97

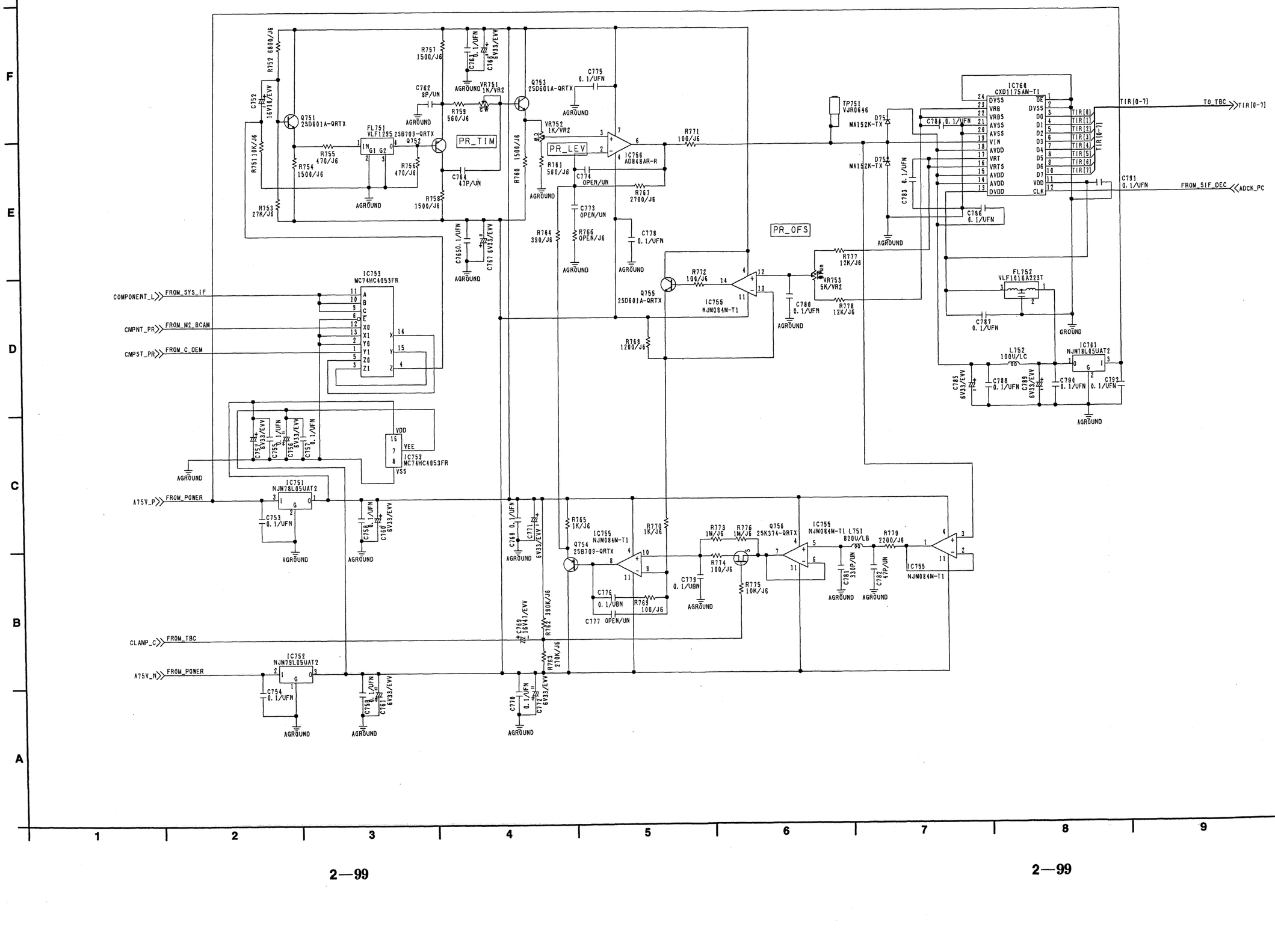
F6 V IN 15/18 (2nd AD PB) SCHEMATIC DIAGRAM



REVERSE SIDE
F6 V IN 14/18

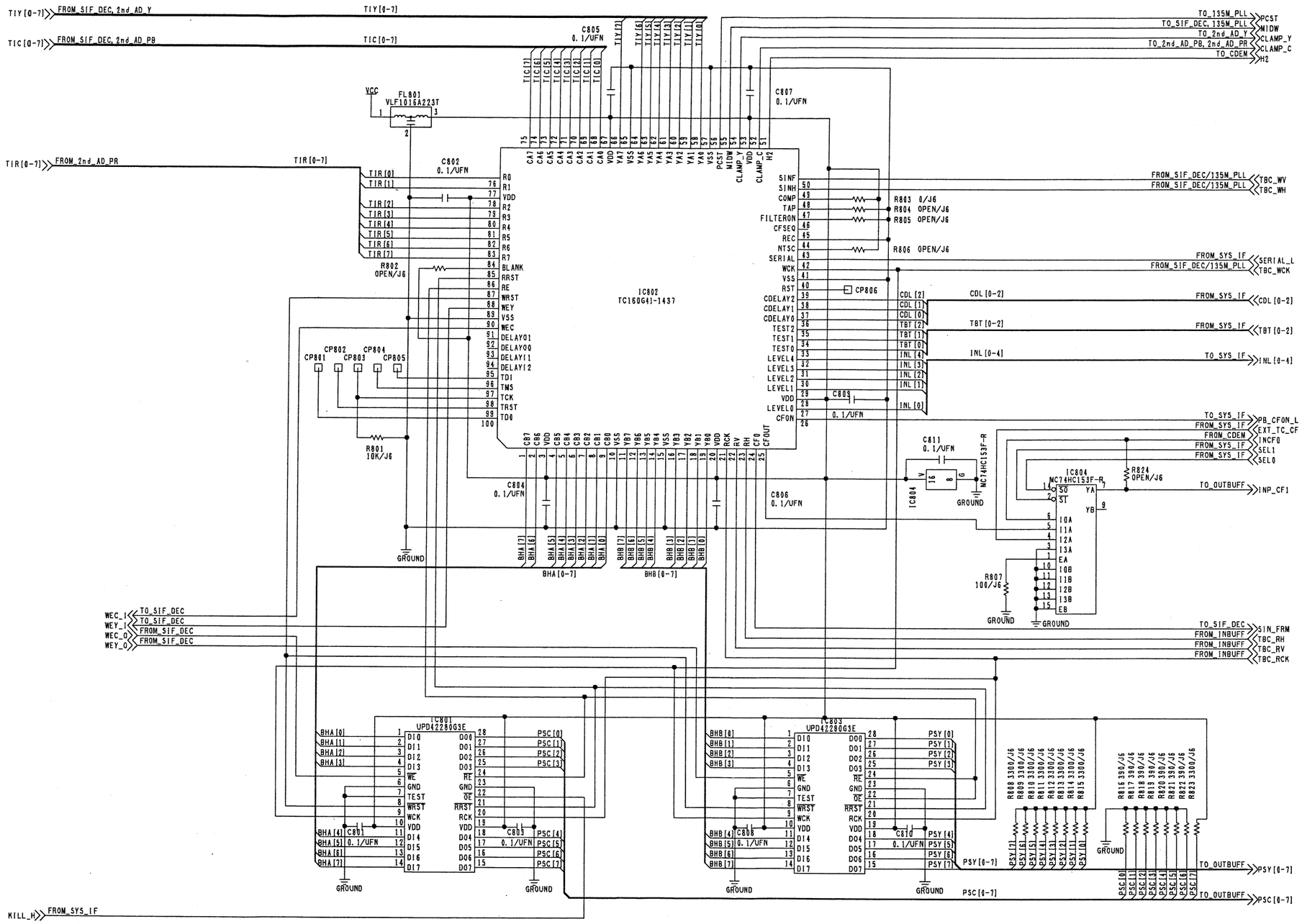
2—98

F6 V IN 16/18 (2nd AD PR) SCHEMATIC DIAGRAM

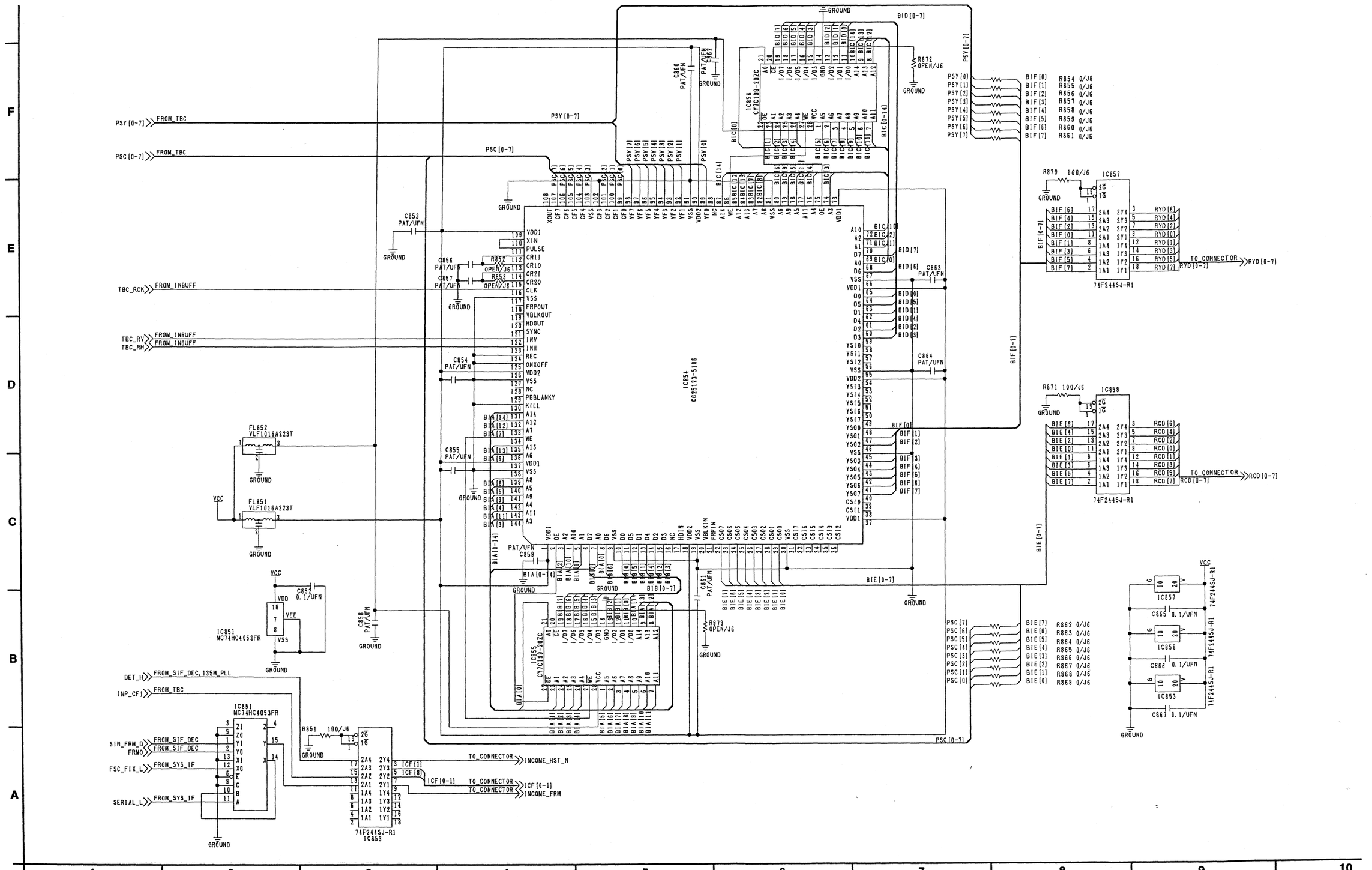


2—99

F6 V IN 17/18 (TBC) SCHEMATIC DIAGRAM

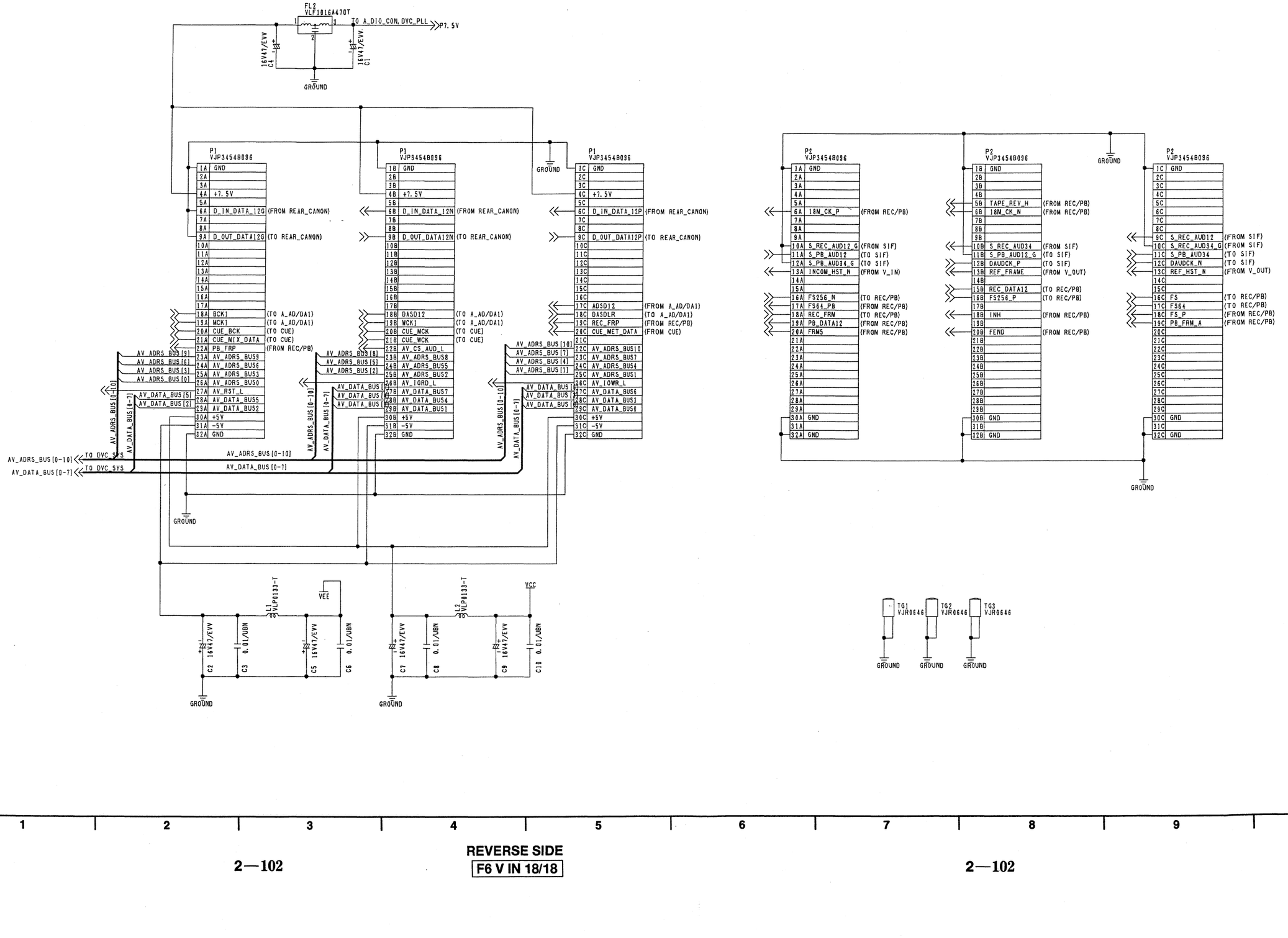


F6 V IN 18/18 (OUT BUFF) SCHEMATIC DIAGRAM

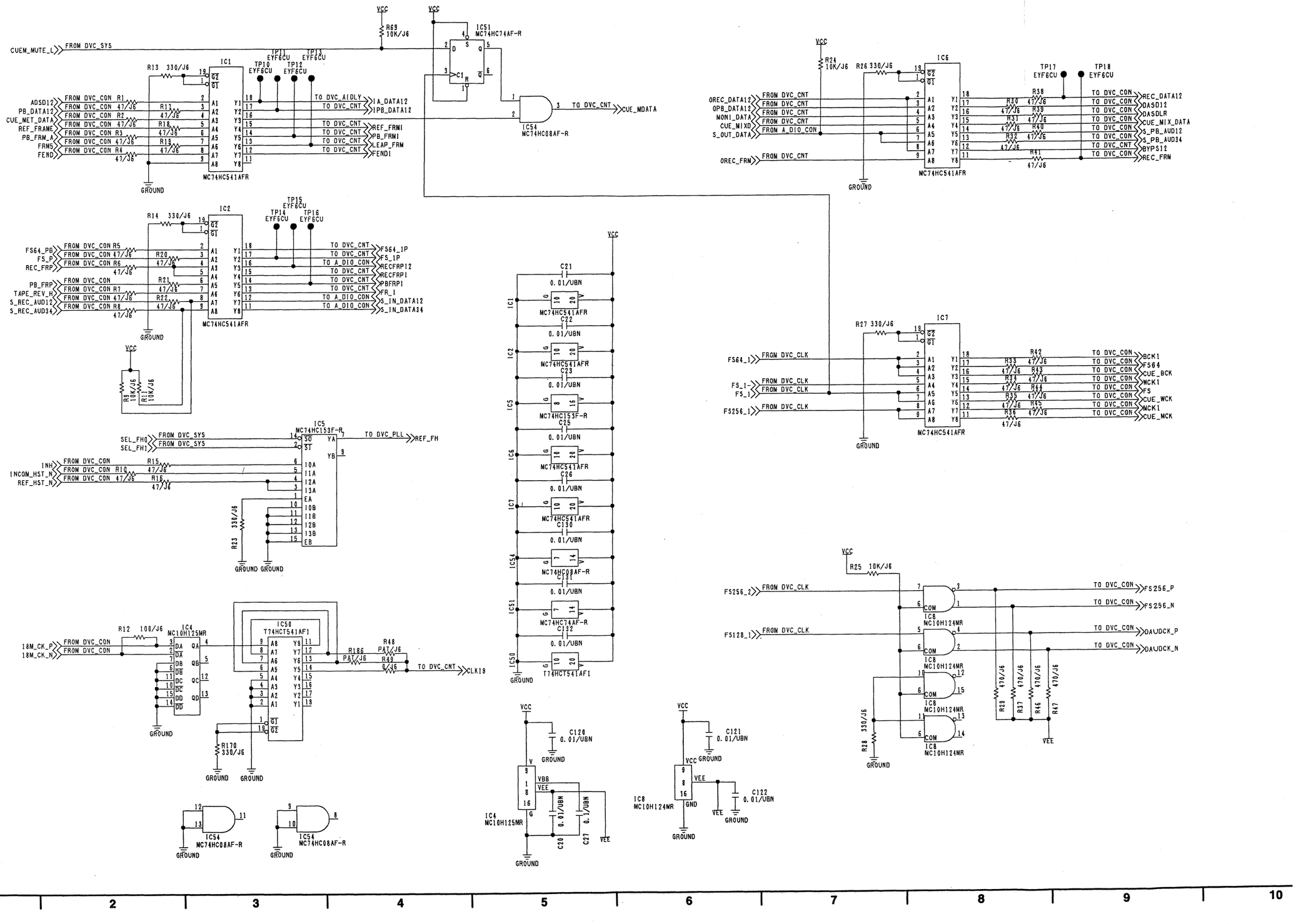


2—101

F7 A PROC 1/13 (CONNECTOR) SCHEMATIC DIAGRAM

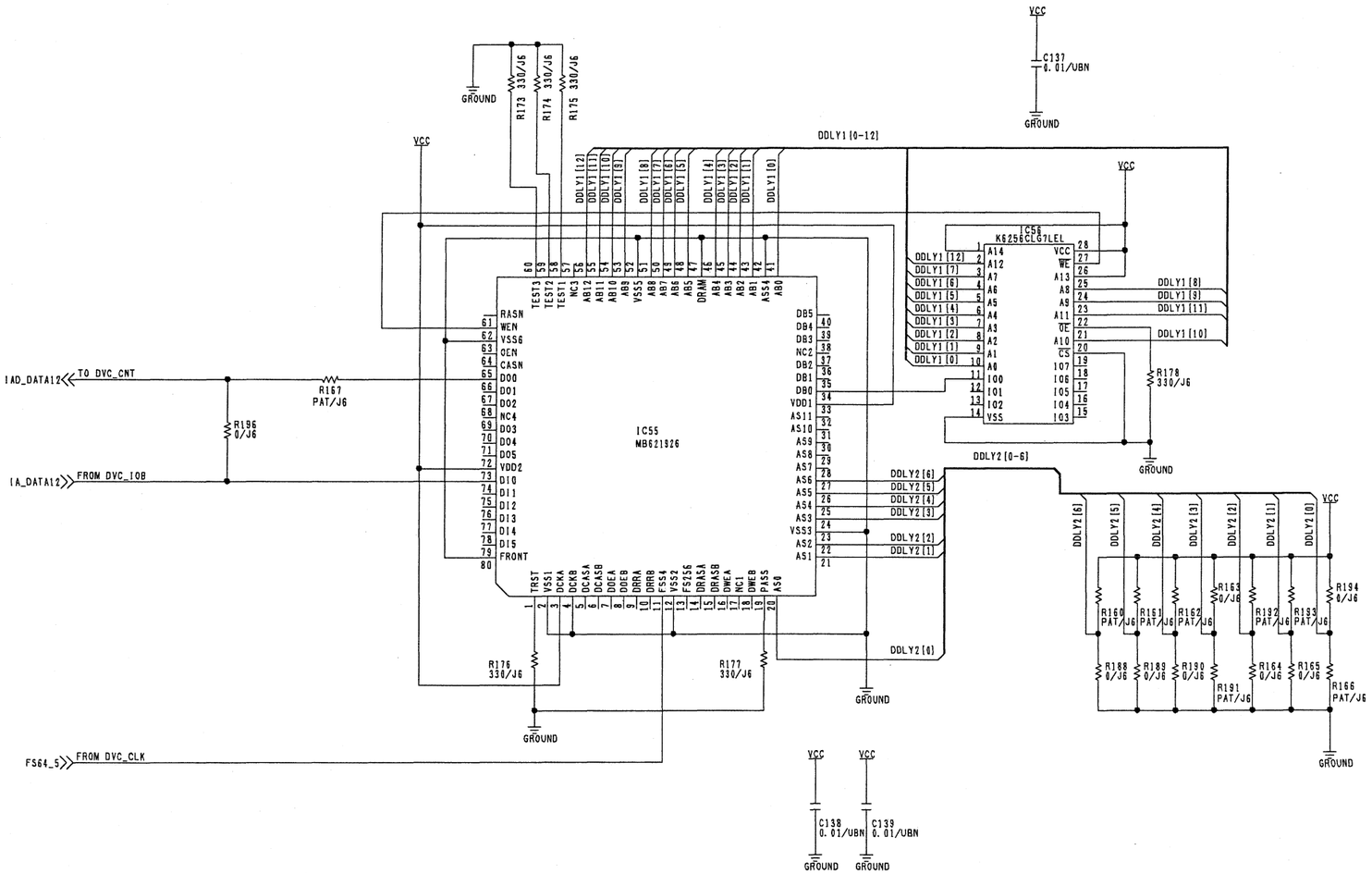


F7 A PROC 2/13 (IO BUFFER) SCHEMATIC DIAGRAM



2—103

F7 A PROC 3/13 (AIN DLY) SCHEMATIC DIAGRAM

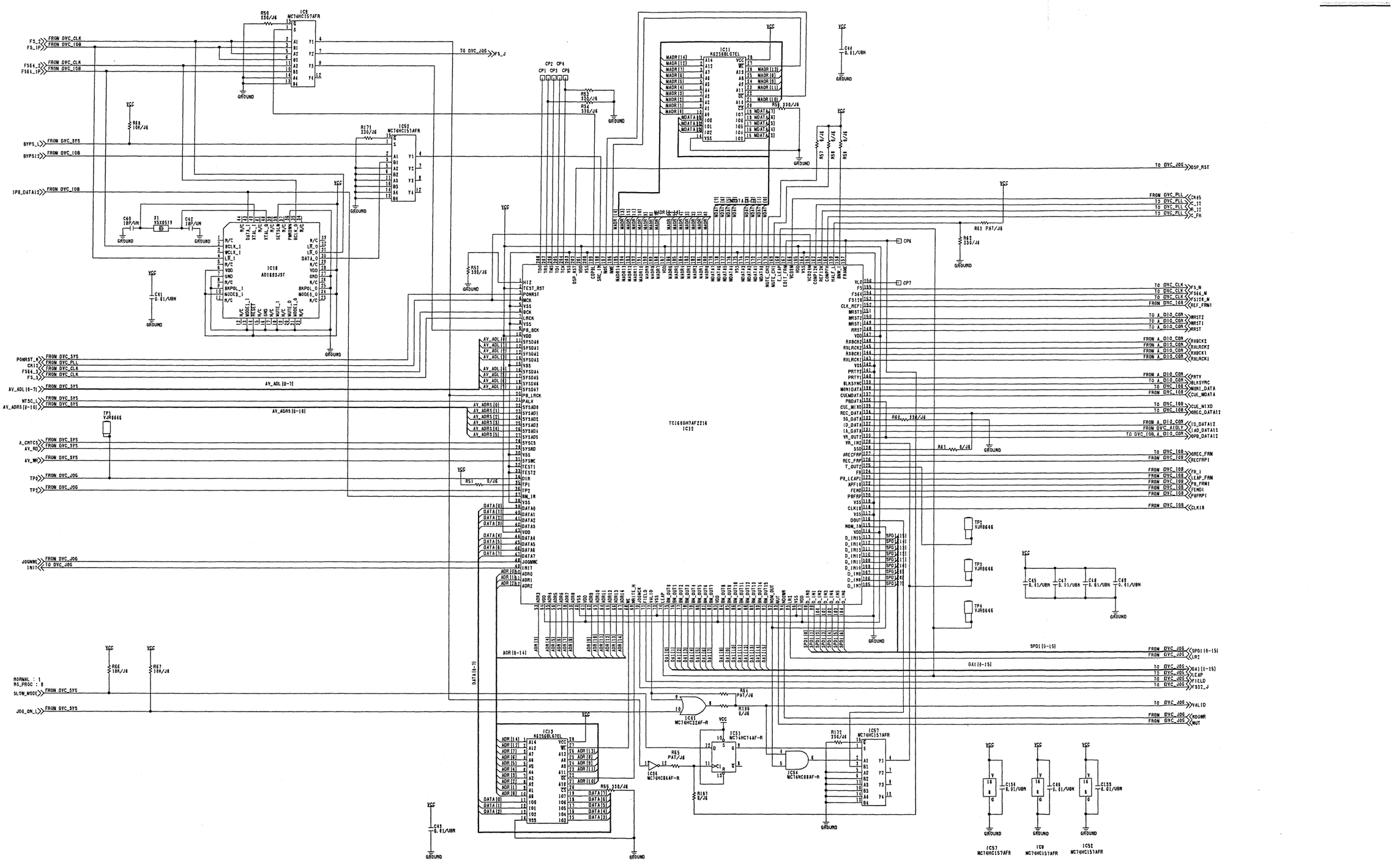


REVERSE SIDE

F7 A PROC 2/13

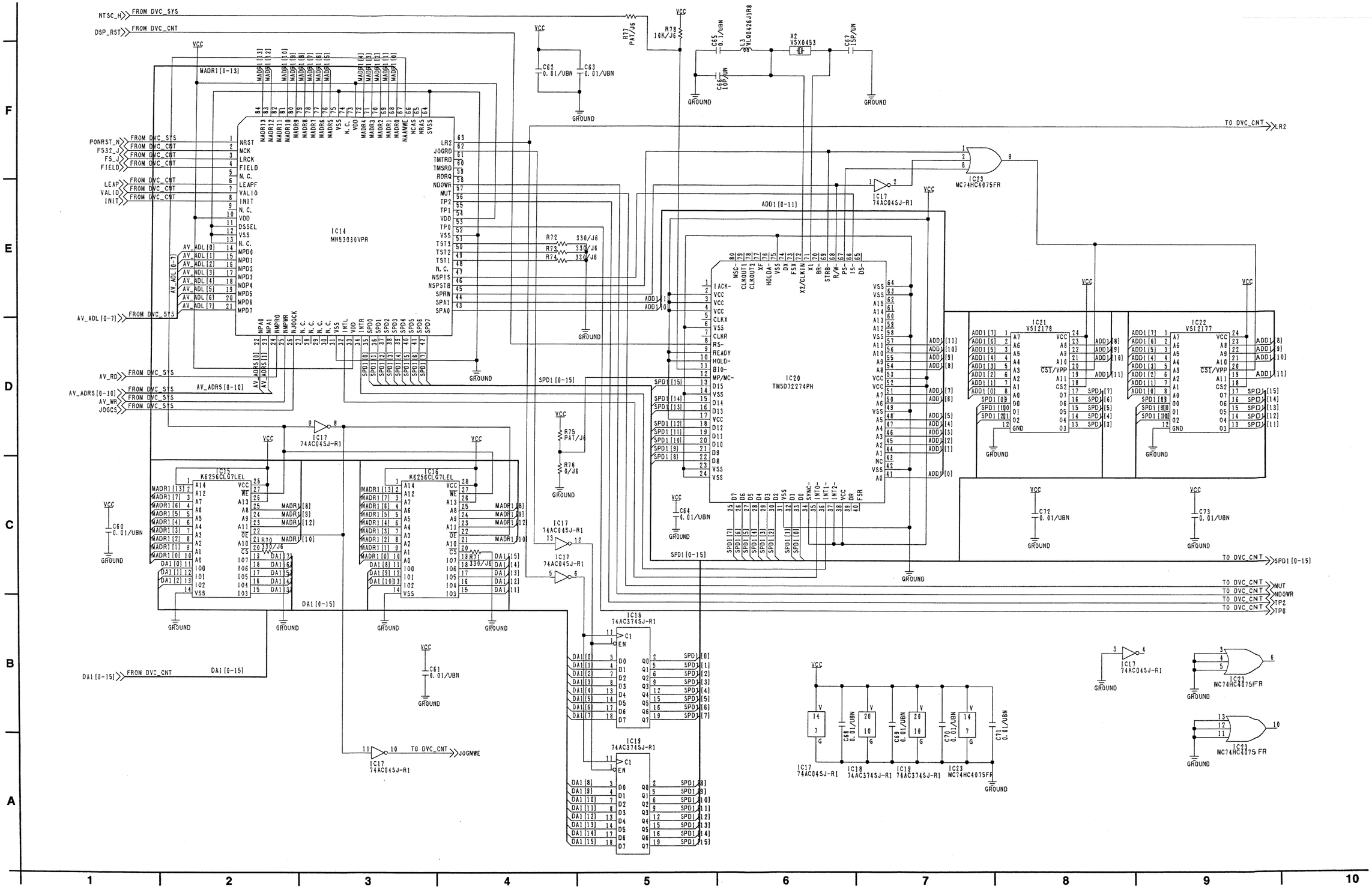
2—104

F7 A PROC 4/13 (AUDIO CNT) SCHEMATIC DIAGRAM

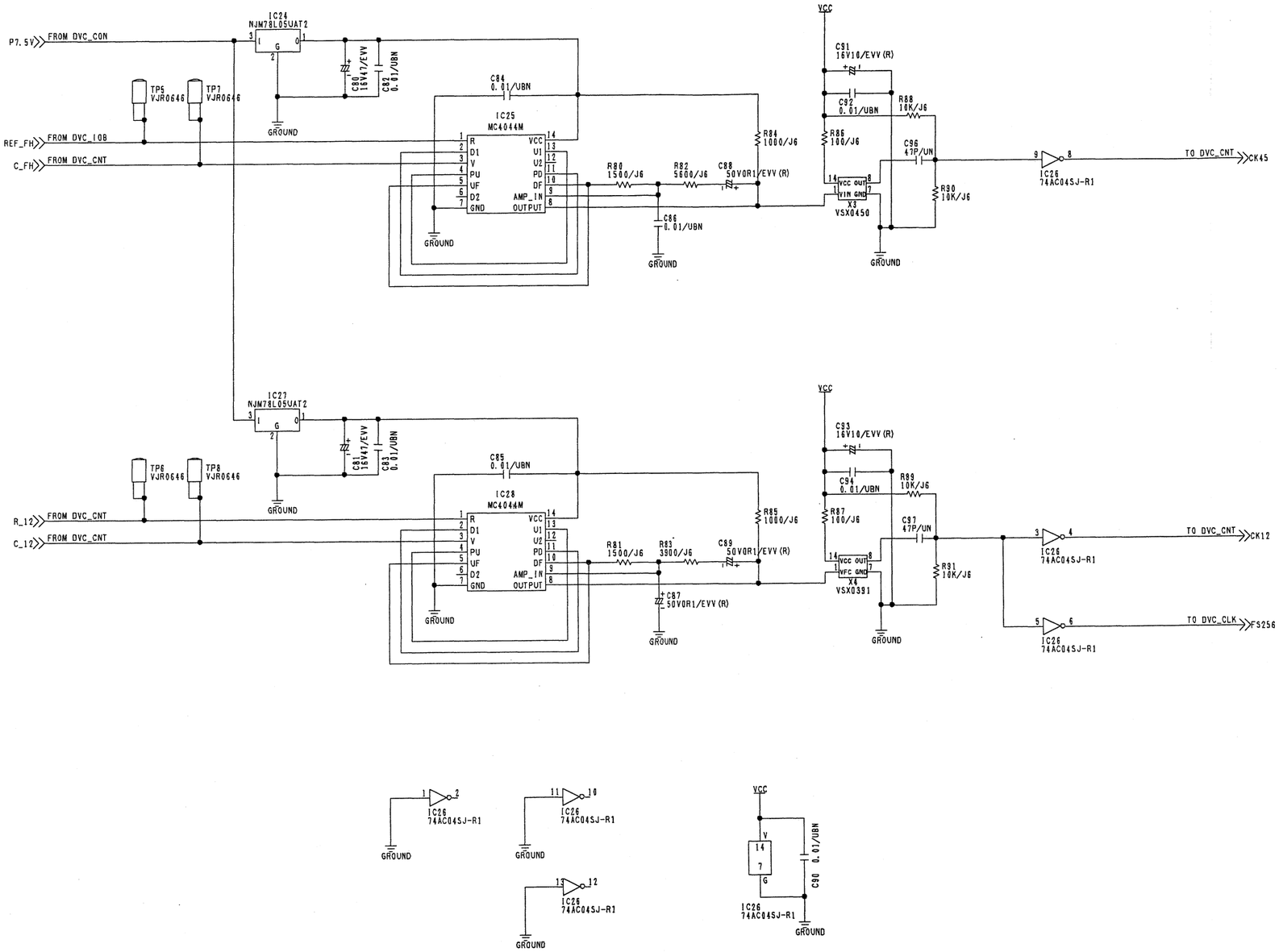


2—105

F7 A PROC 5/13 (SLOW CTL) SCHEMATIC DIAGRAM

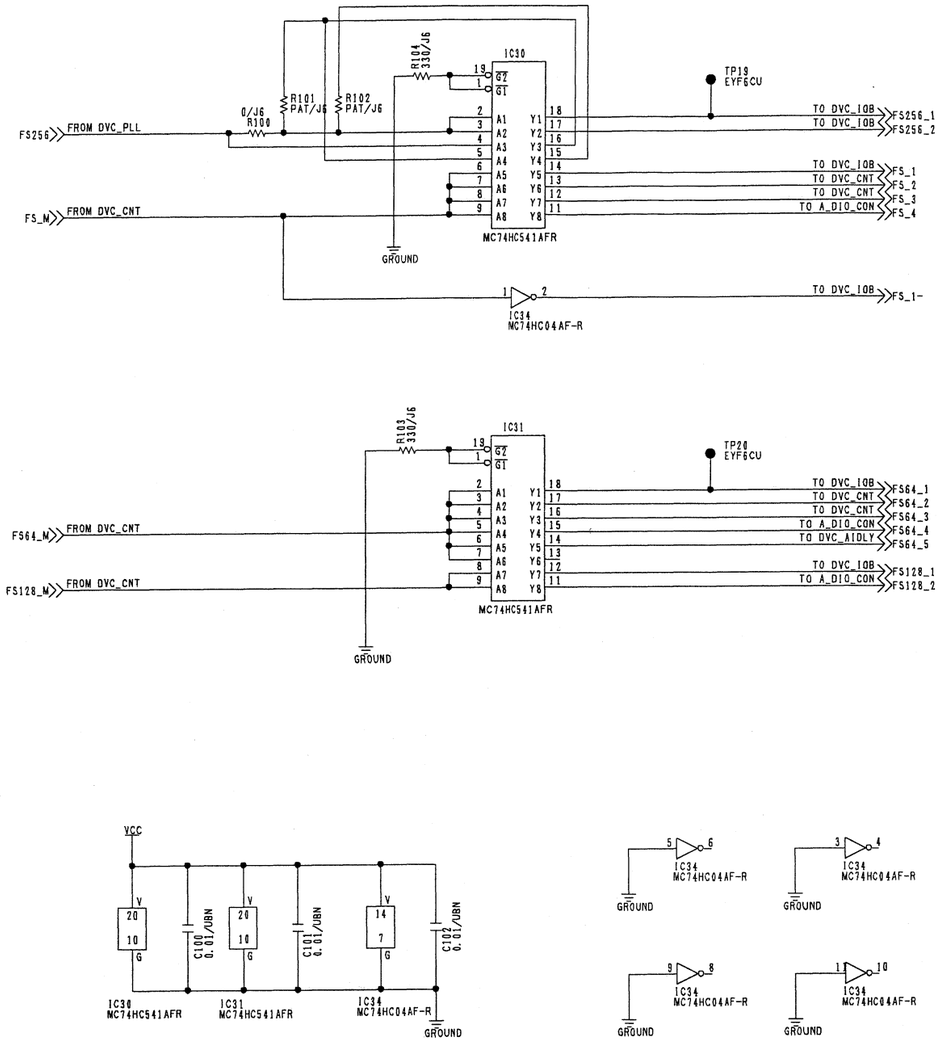


F7 A PROC 6/13 (PLL) SCHEMATIC DIAGRAM

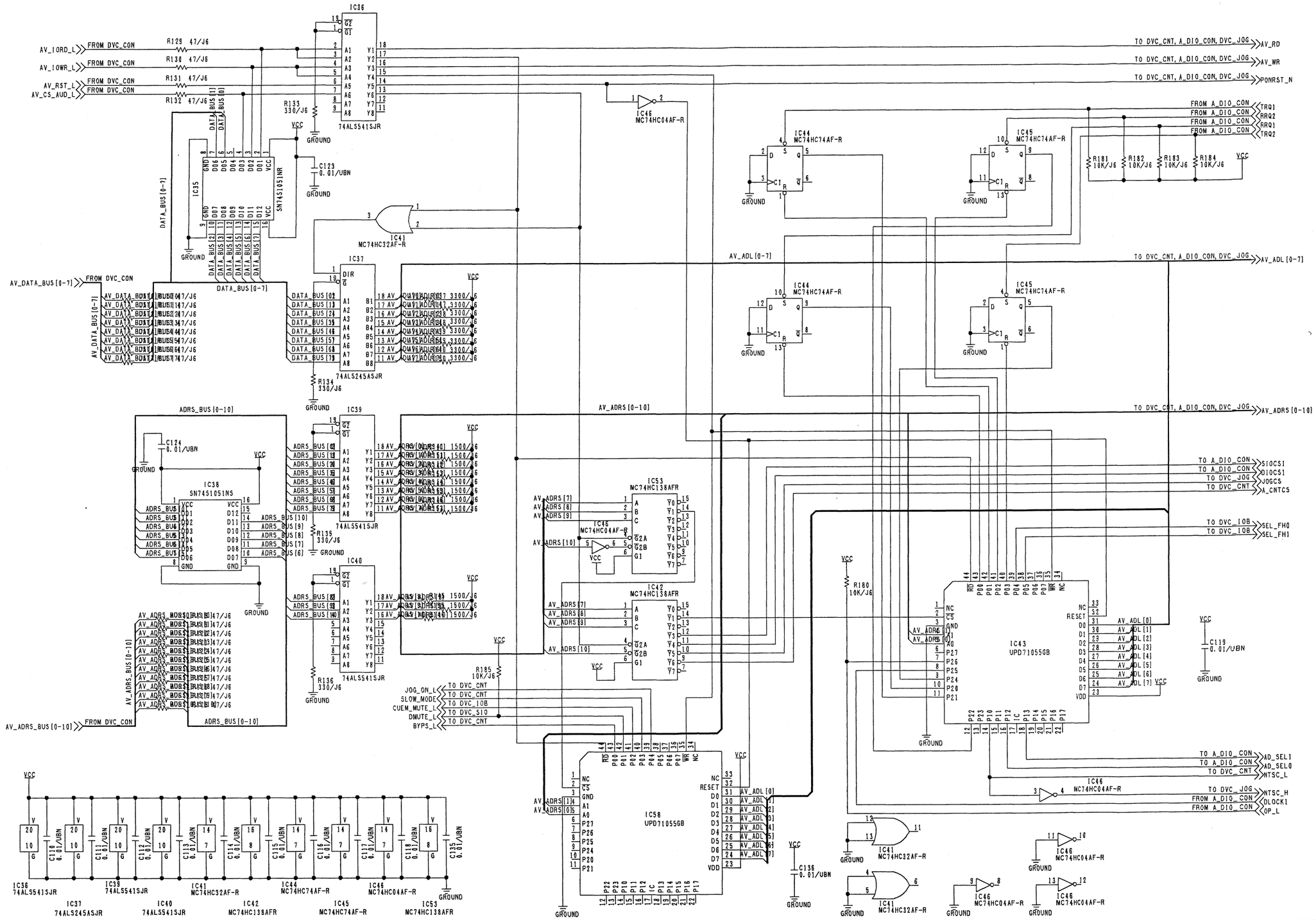


2—107

F7 A PROC 7/13 (CLK BUFFER) SCHEMATIC DIAGRAM

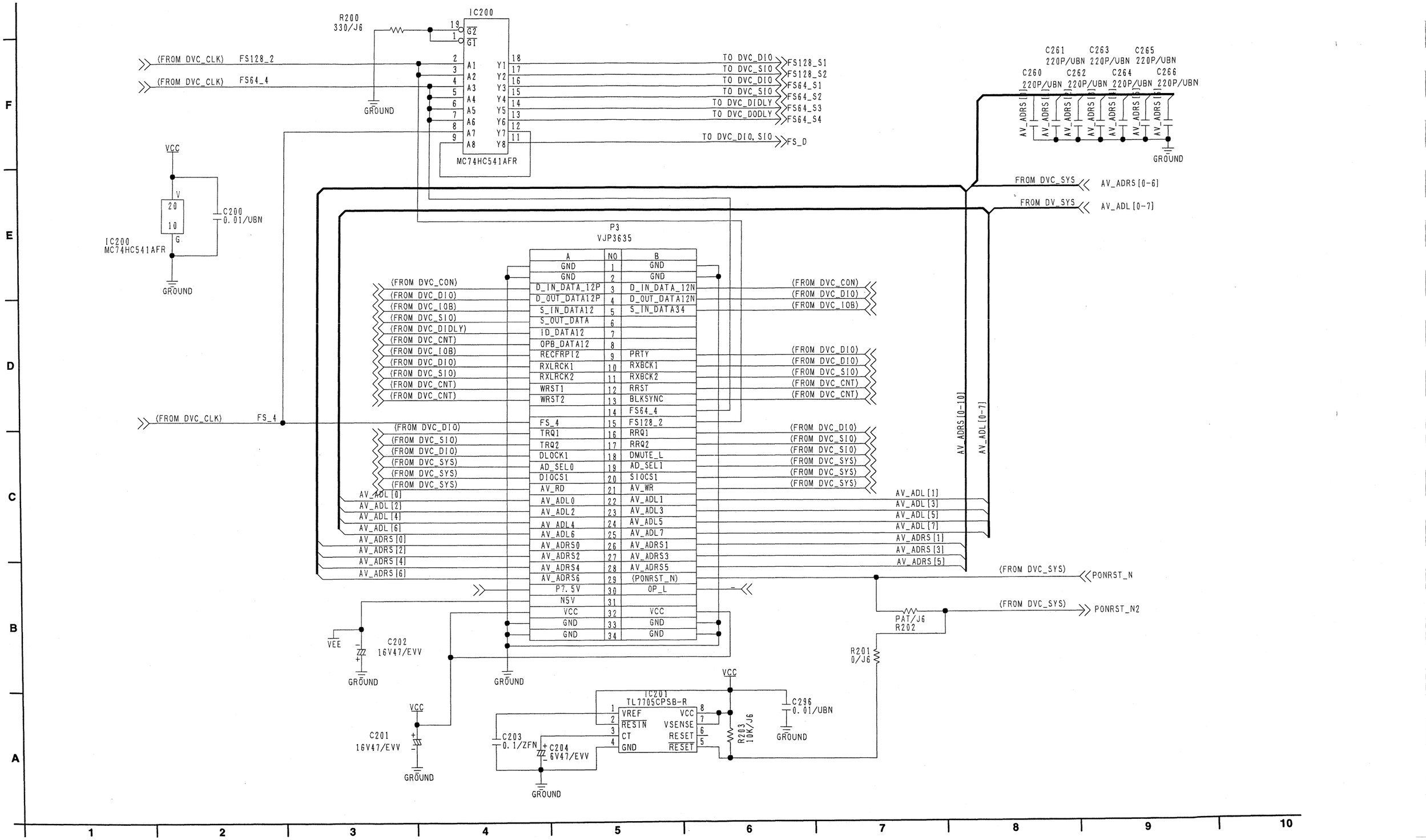


F7 A PROC 8/13 (SYS IF) SCHEMATIC DIAGRAM

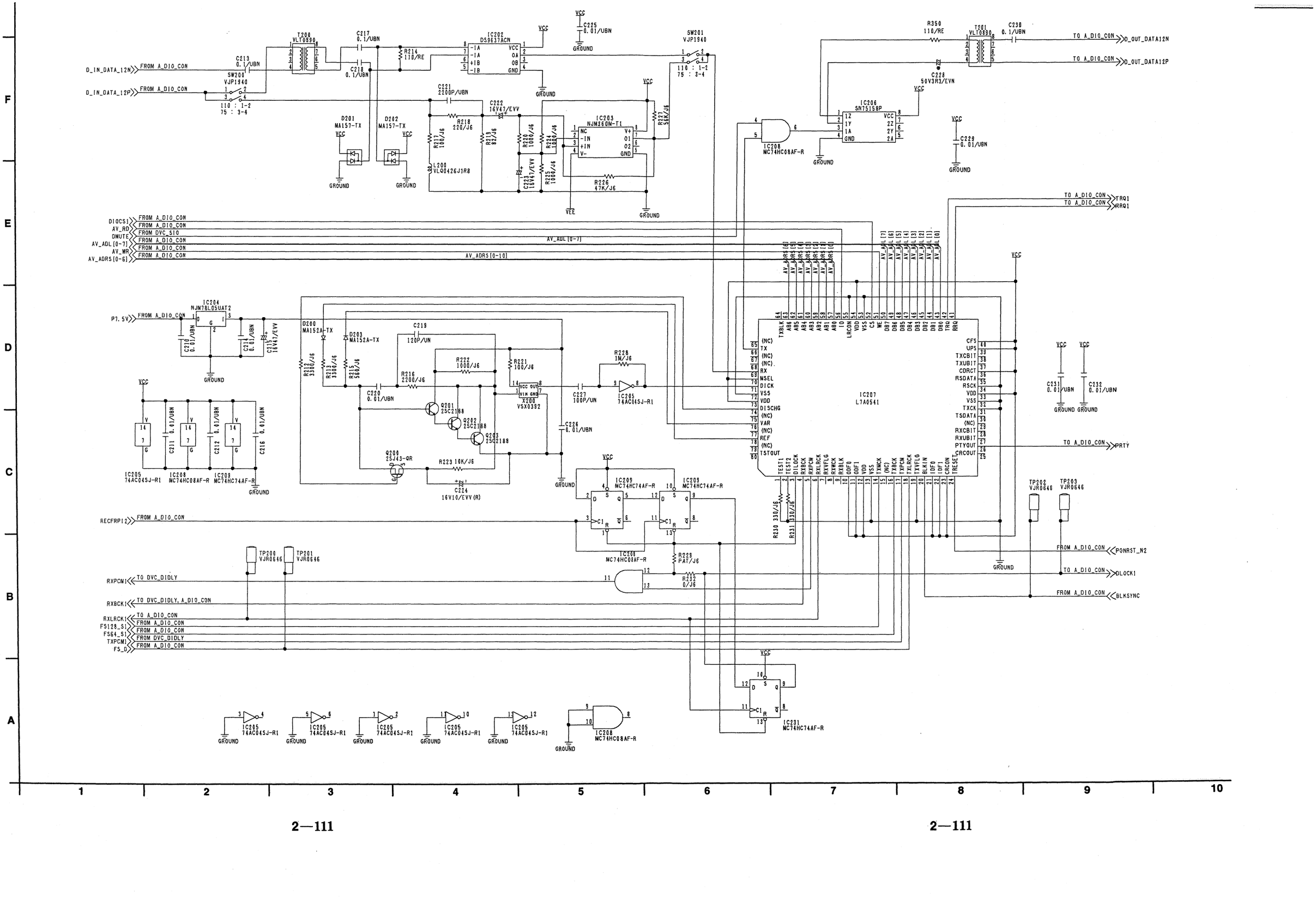


2—109

F7 A PROC 9/13 (DIO CONNECTOR) SCHEMATIC DIAGRAM

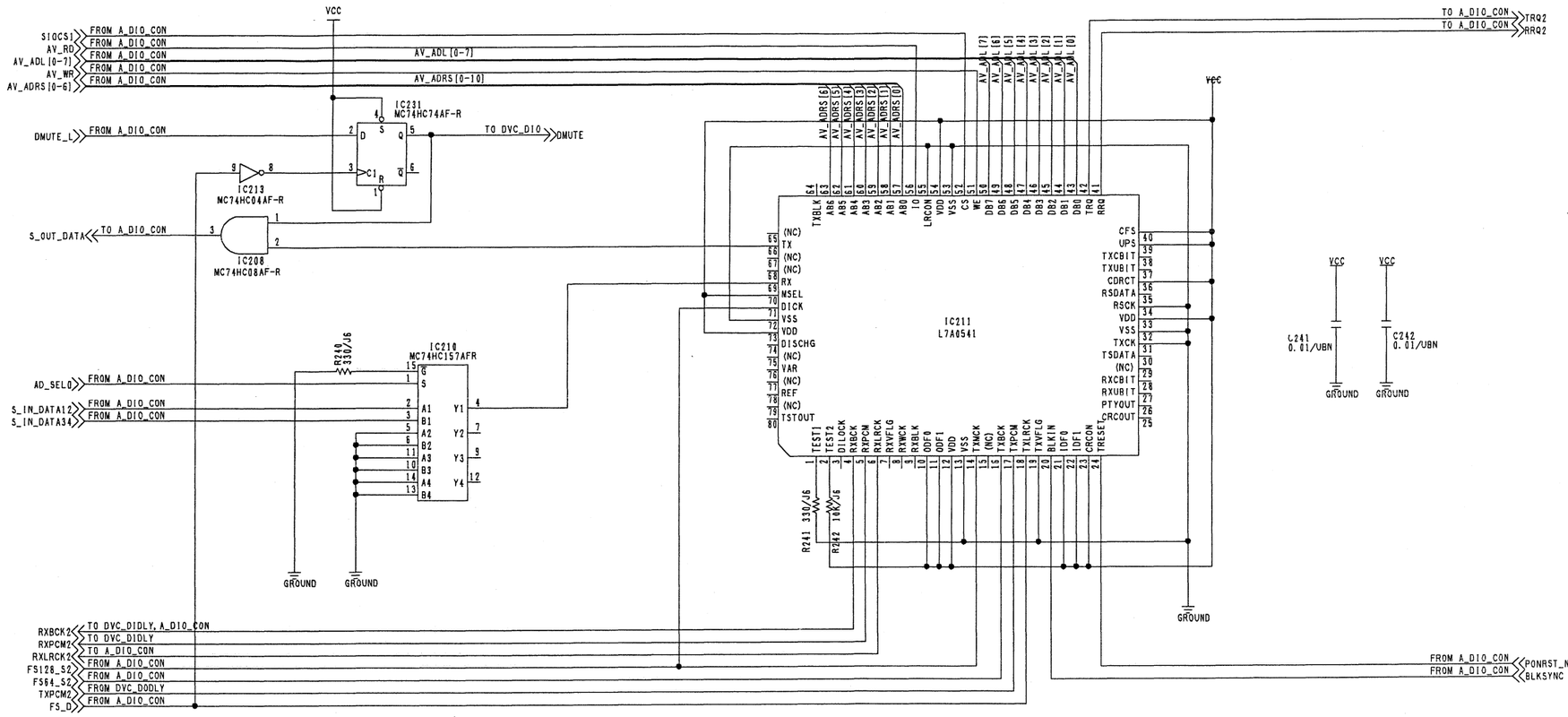


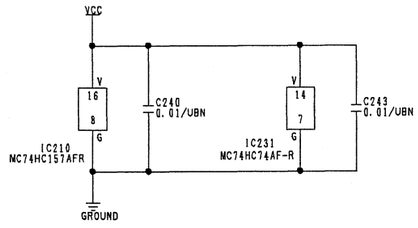
F7 A PROC 10/13 (DIO) SCHEMATIC DIAGRAM



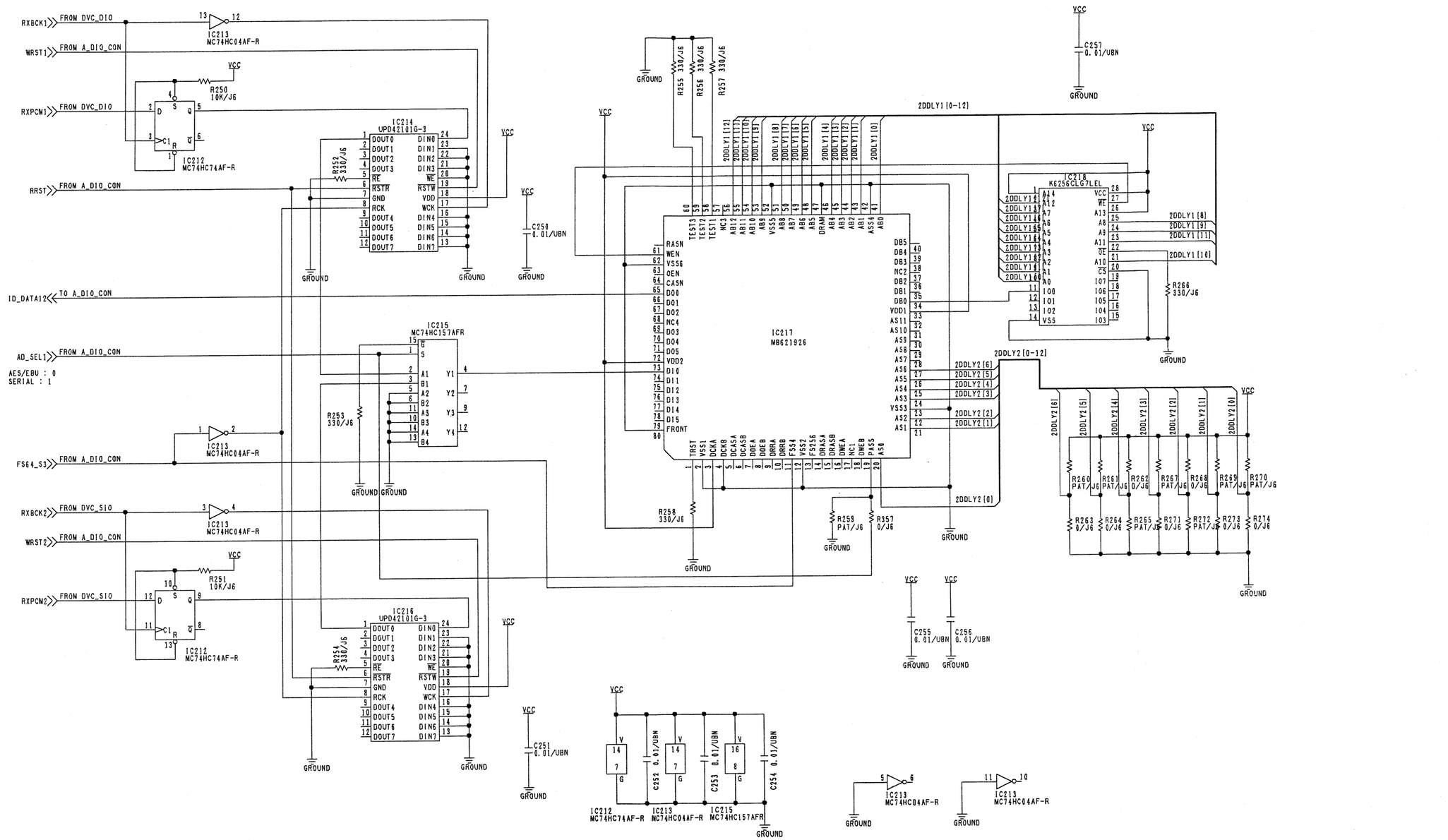
2—111

F7 A PROC 11/13 (SIO) SCHEMATIC DIAGRAM



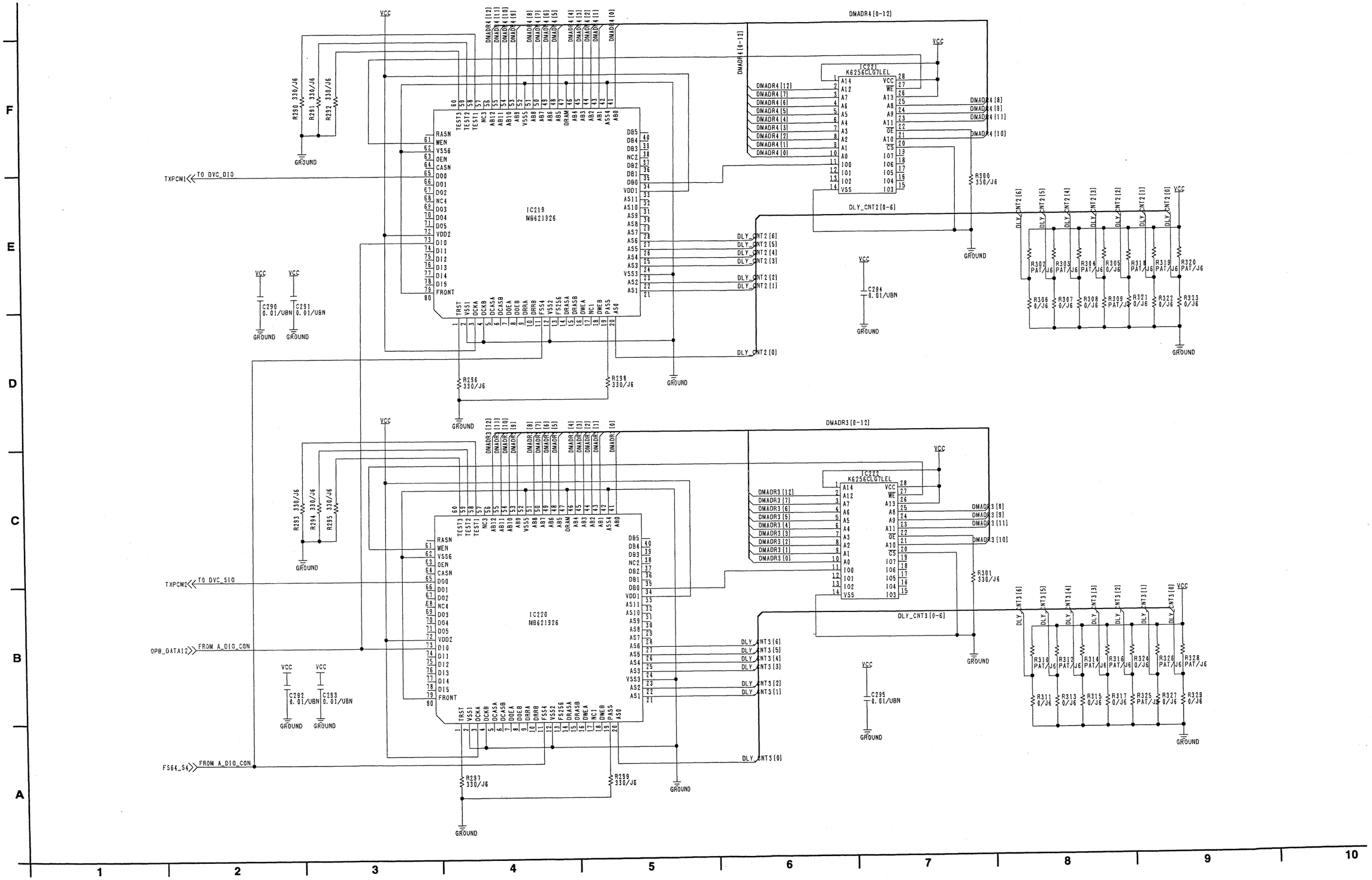


F7 A PROC 12/13 (DIN DLY) SCHEMATIC DIAGRAM



2—113

F7 A PROC 13/13 (DOUT DLY) SCHEMATIC DIAGRAM

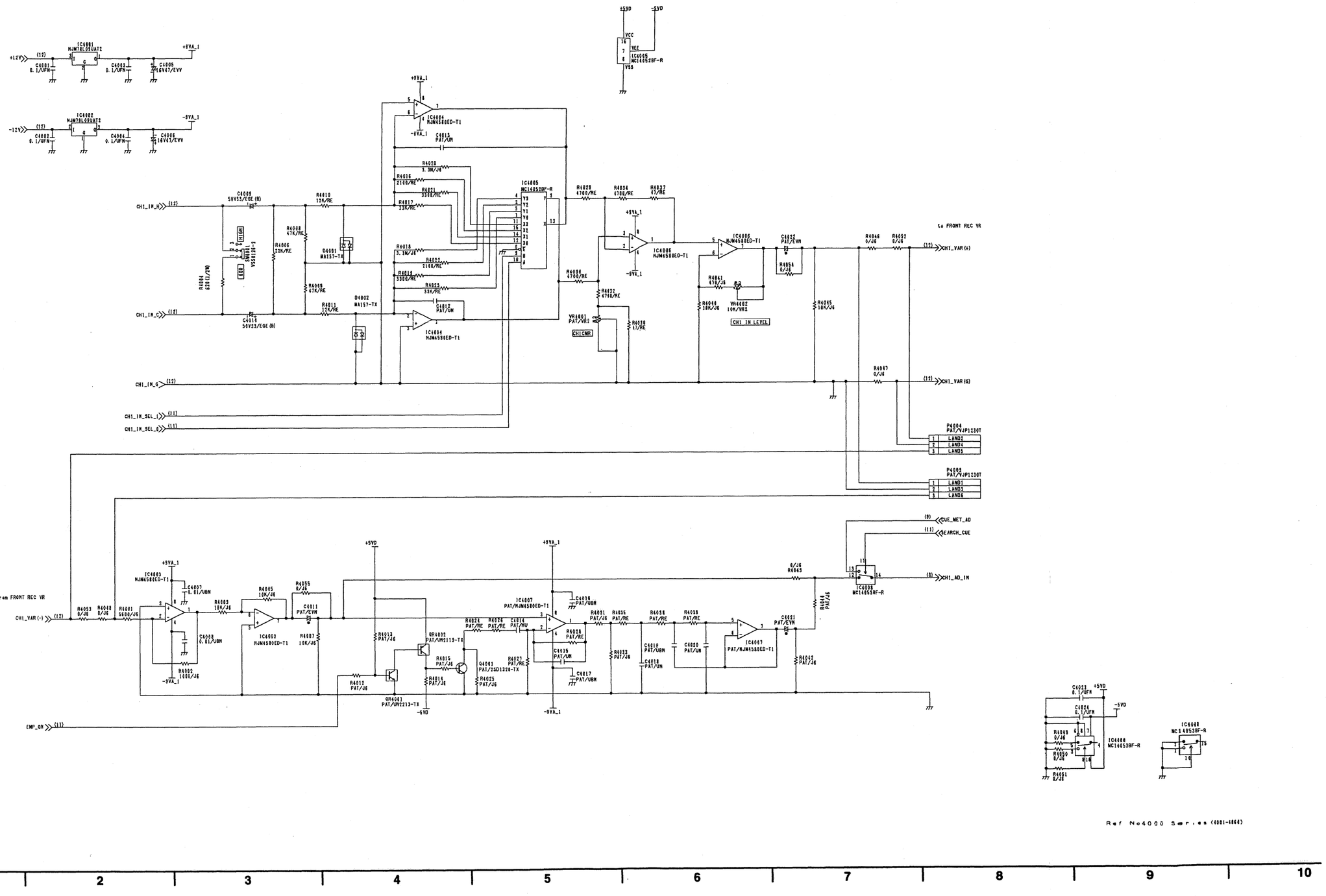


REVERSE SIDE

F7 A PROC 12/13

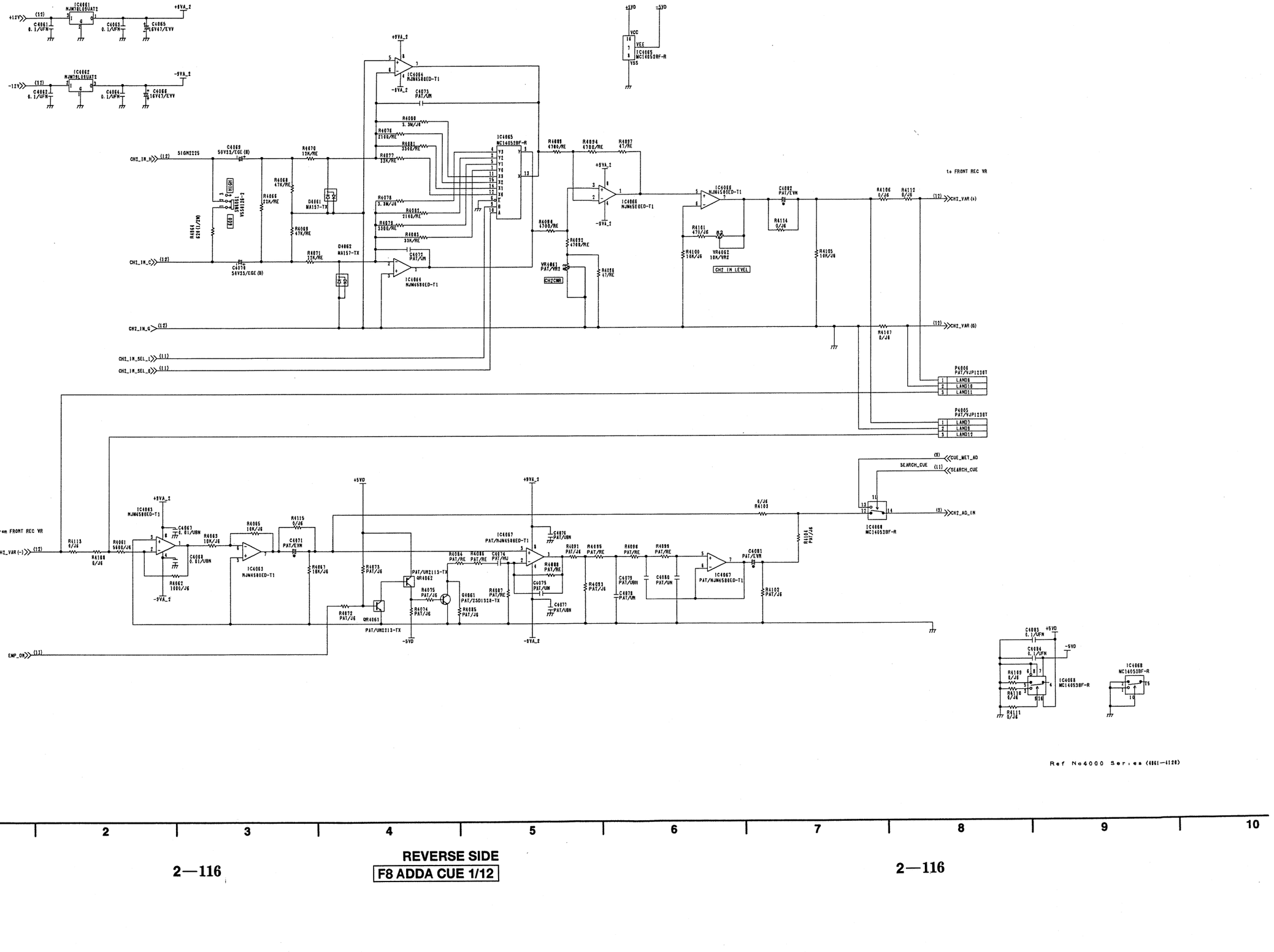
2—114

F8 ADDA CUE 1/12 SCHEMATIC DIAGRAM

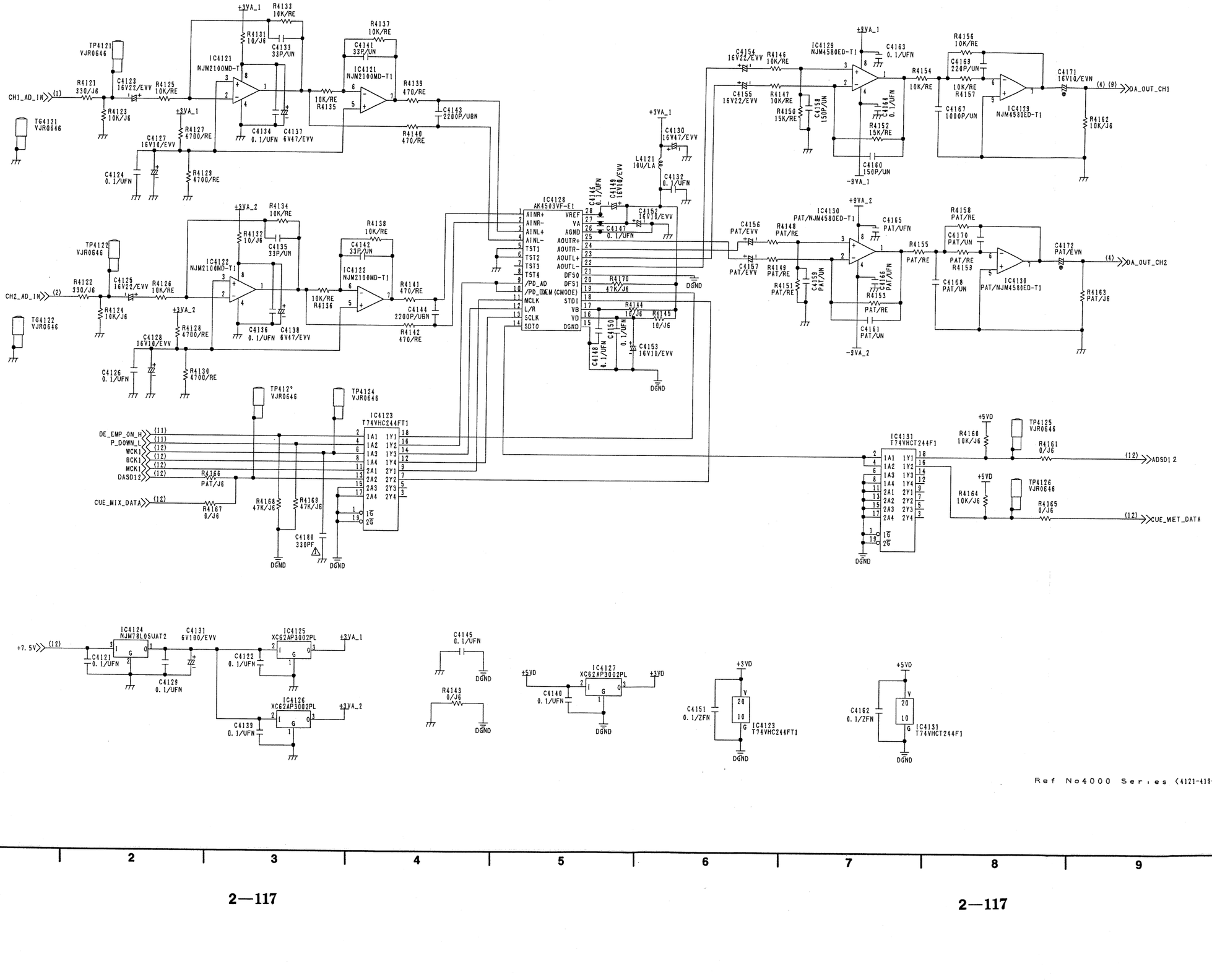


2—115

F8 ADDA CUE 2/12 SCHEMATIC DIAGRAM

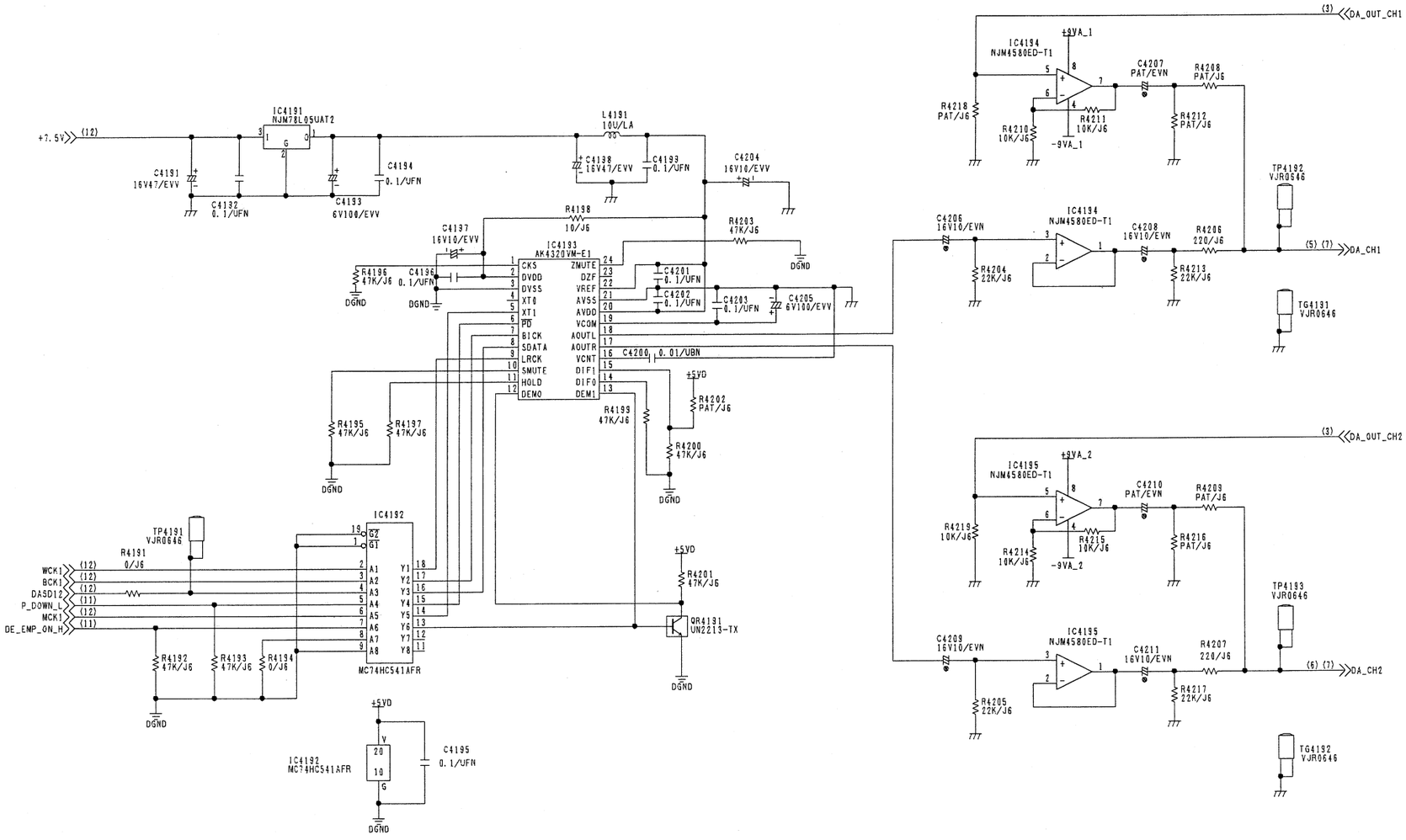


F8 ADDA CUE 3/12 SCHEMATIC DIAGRAM



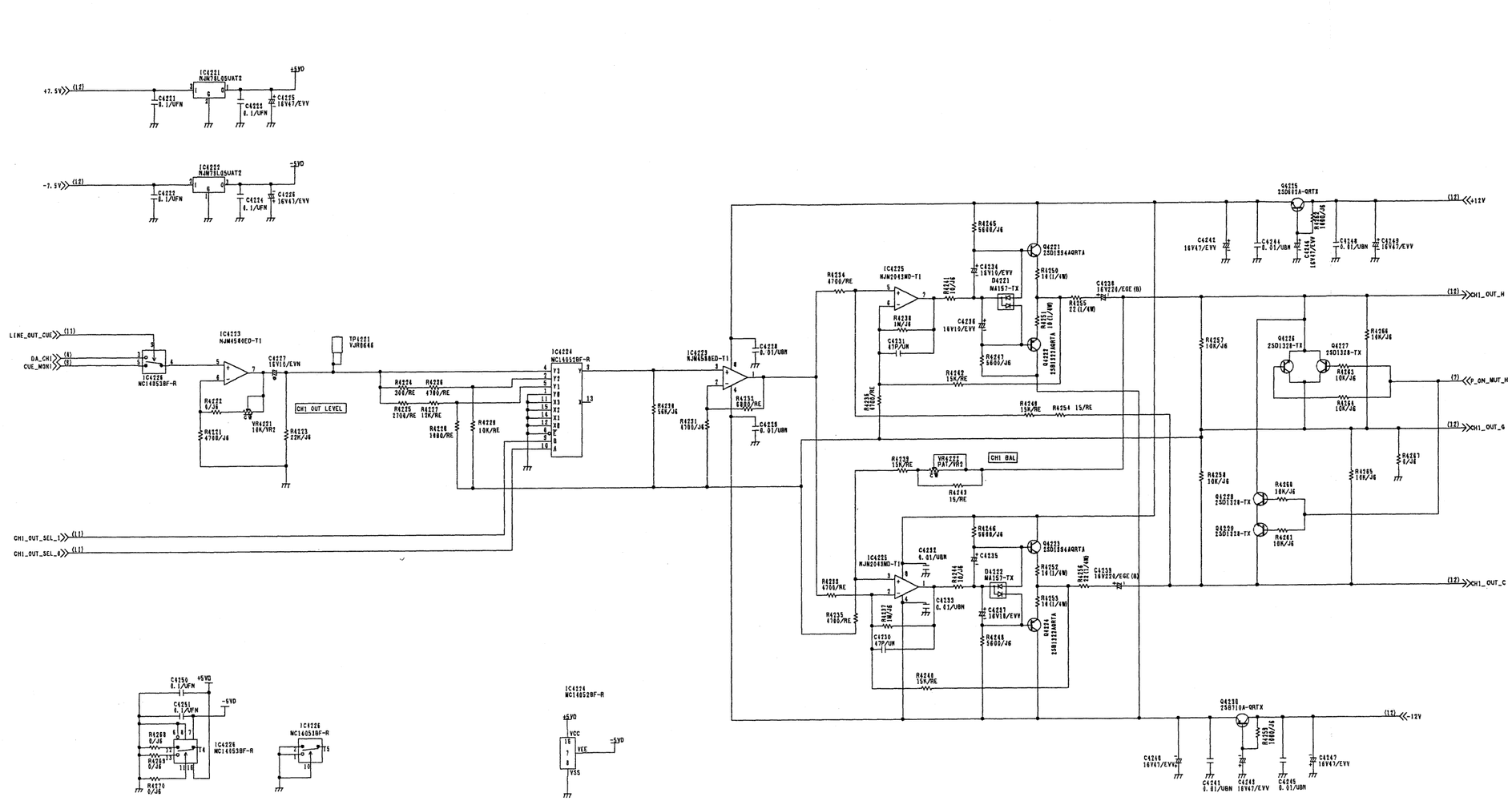
2—117

F8 ADDA CUE 4/12 SCHEMATIC DIAGRAM



Ref No4000 Series (4191-4220)

F8 ADDA CUE 5/12 SCHEMATIC DIAGRAM

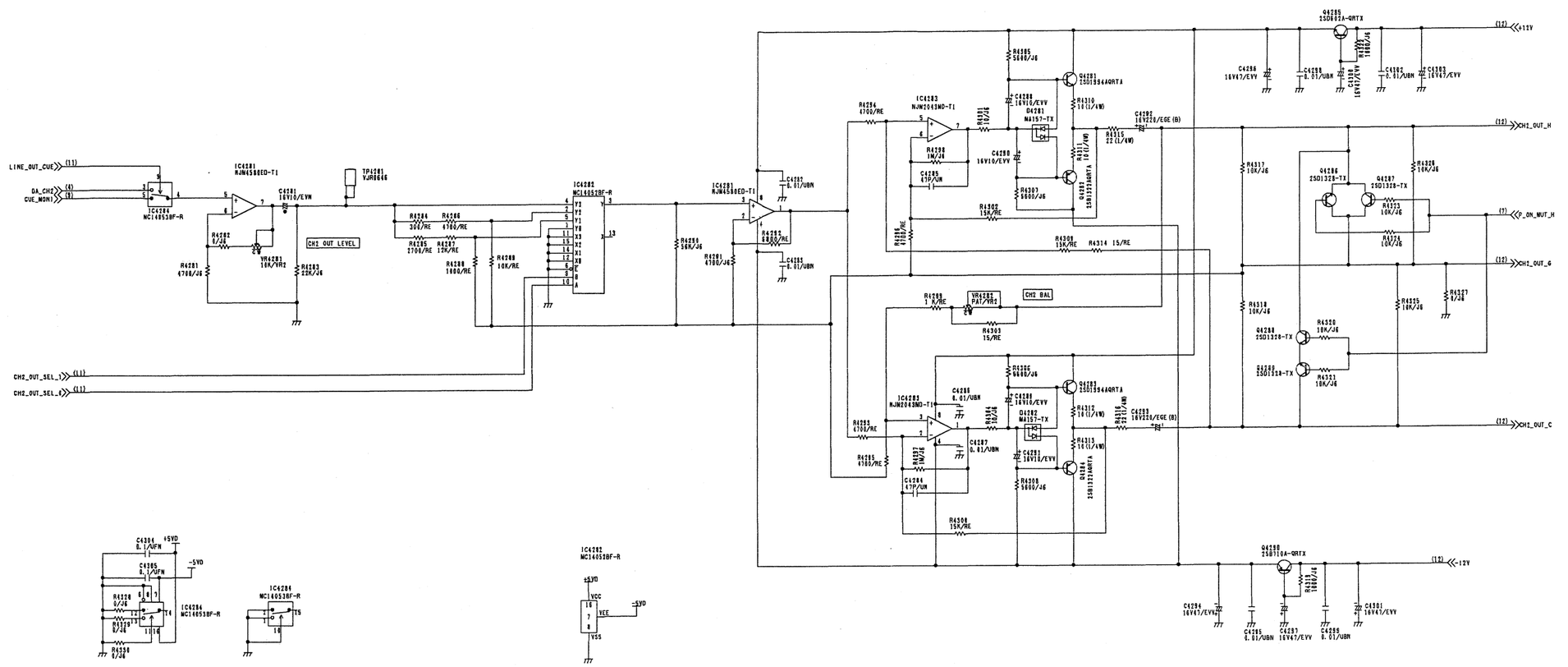


CONTROL SIGNAL		OUTPUT LEVEL	
(SEL_0) A	(SEL_1) B		
0	0	Y0	MUTE
1	0	Y1	−20dBu
0	1	Y2	0dBu
1	1	Y3	+4dBu

Ref No4000 Series (4221-4280)

2—119

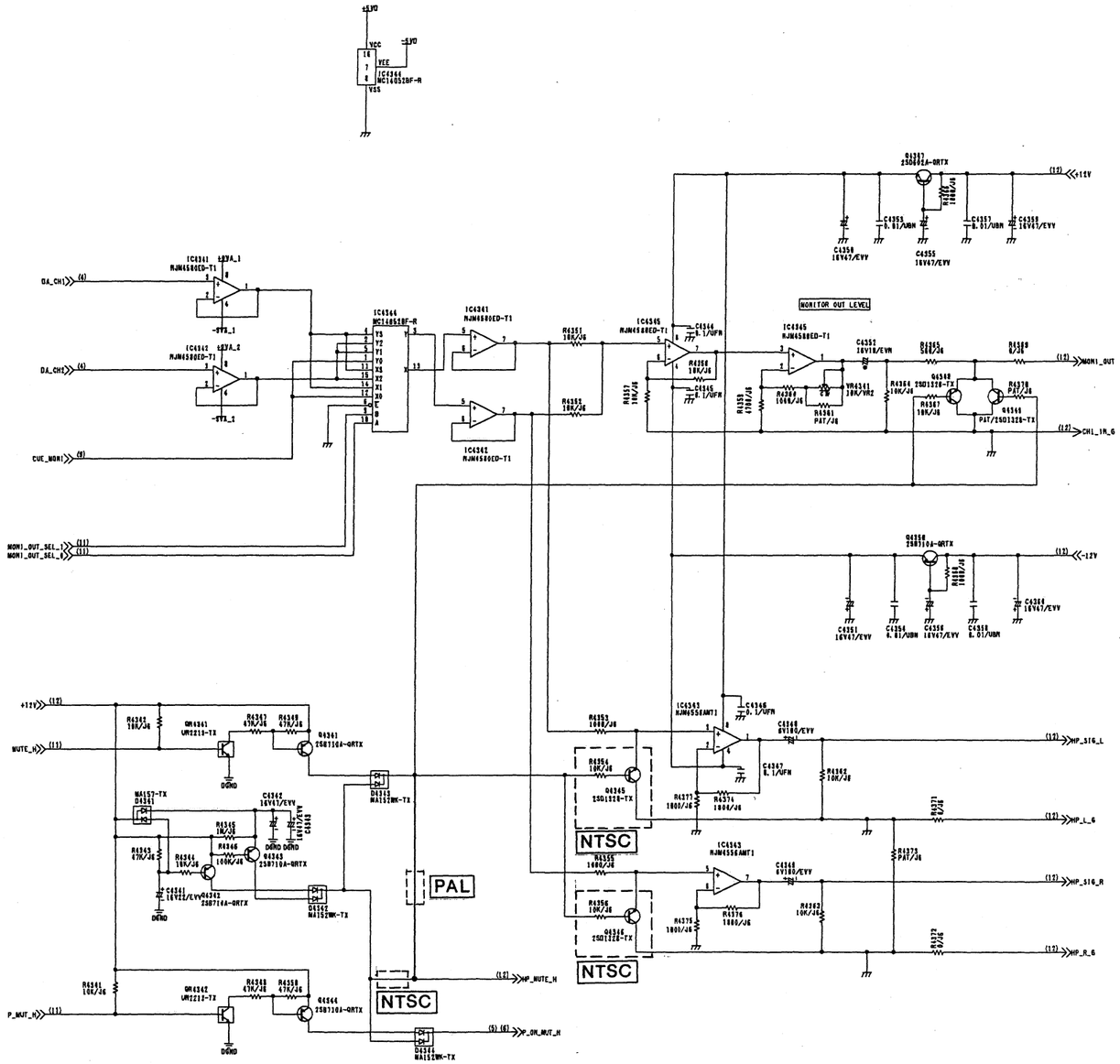
F8 ADDA CUE 6/12 SCHEMATIC DIAGRAM



CONTROL SIGNAL		OUTPUT LEVEL	
(SEL_0) A	(SEL_1) B		
0	0	Y0	MUTE
1	0	Y1	−20dBu
0	1	Y2	0dBu
1	1	Y3	+4dBu

Ref No4000 Series (4281-4340)

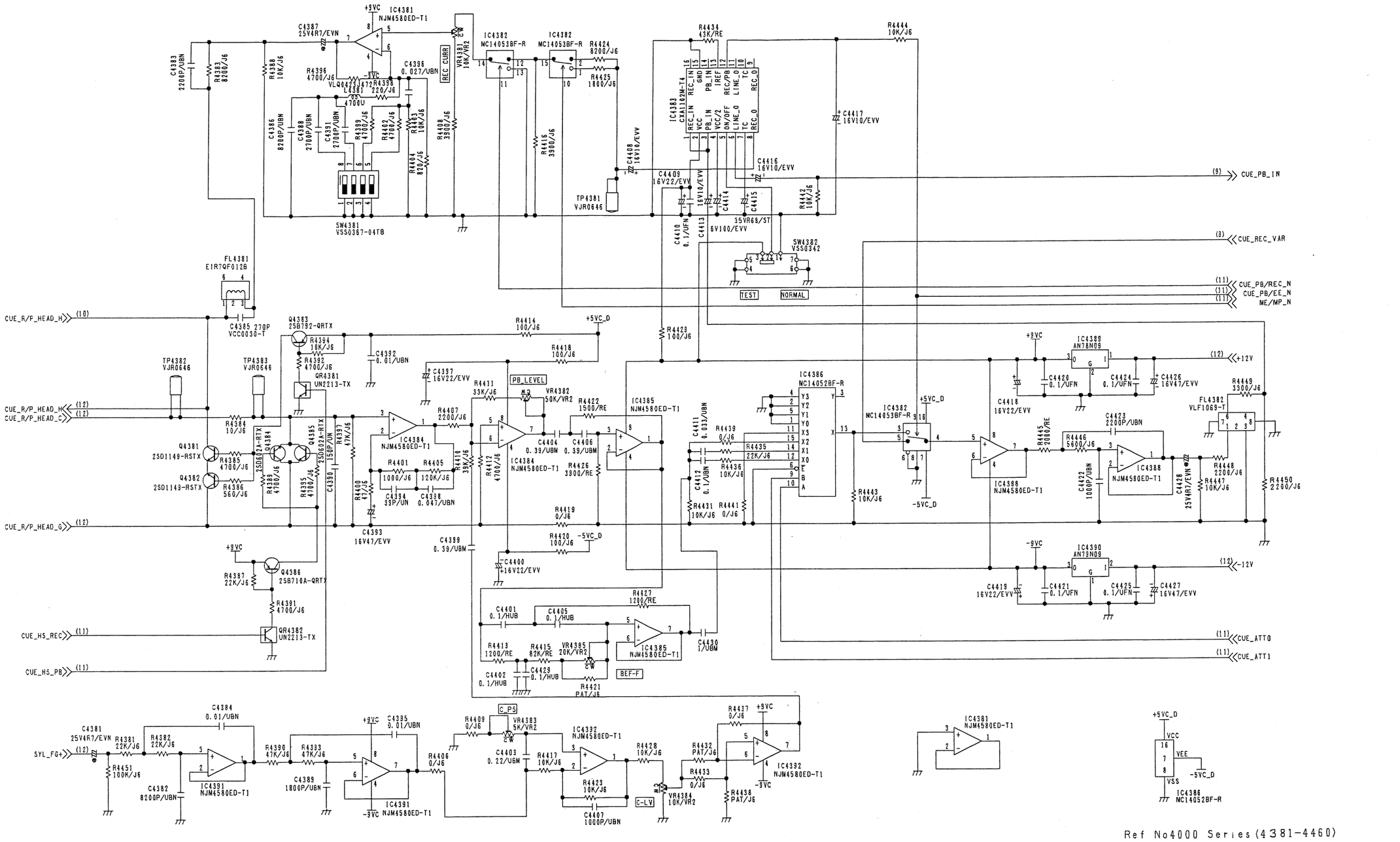
F8 ADDA CUE 7/12 SCHEMATIC DIAGRAM



Ref No4000 Series <4341-4588>

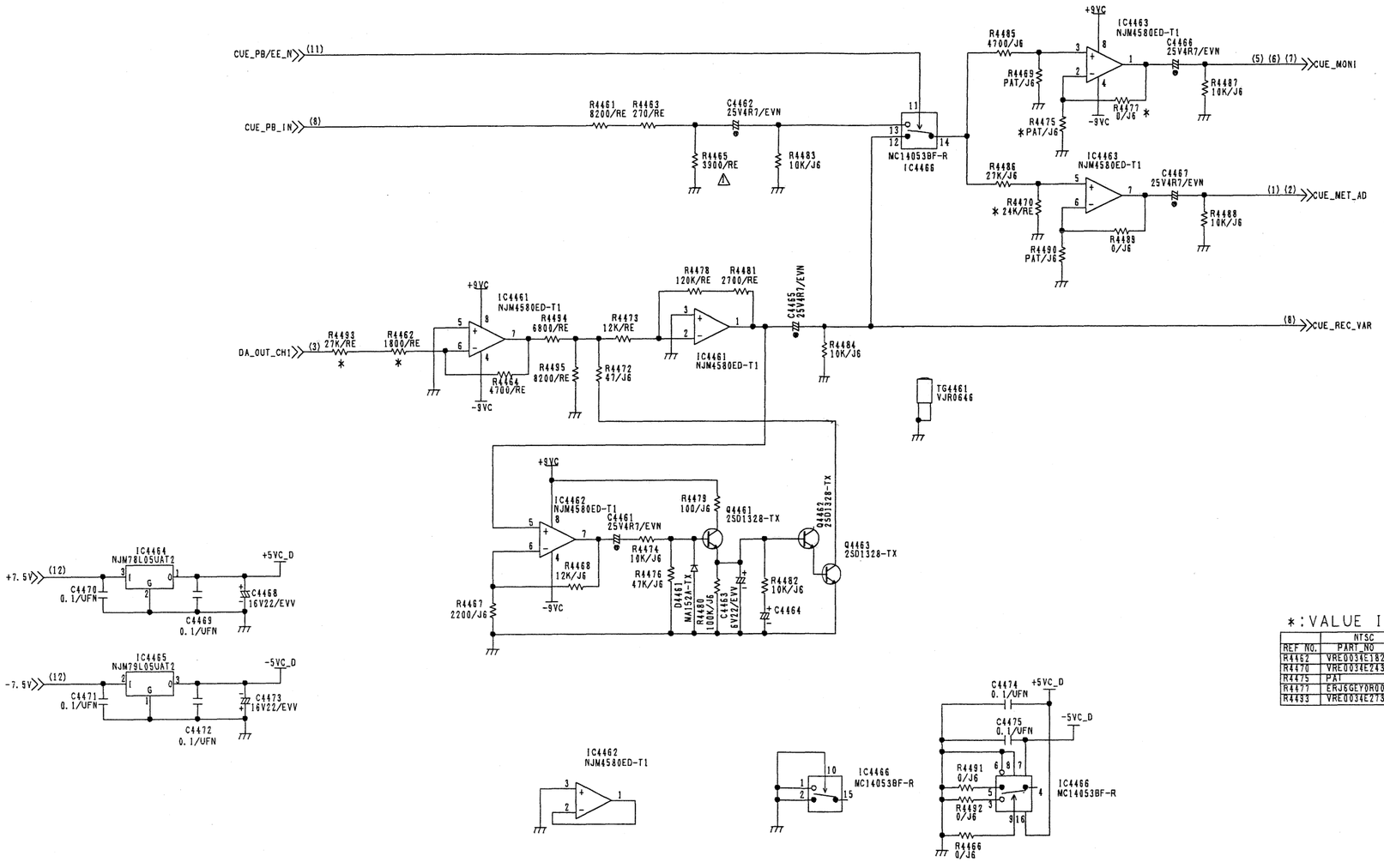
2—121

F8 ADDA CUE 8/12 SCHEMATIC DIAGRAM



Ref No4000 Series (4381-4460)

F8 ADDA CUE 9/12 SCHEMATIC DIAGRAM



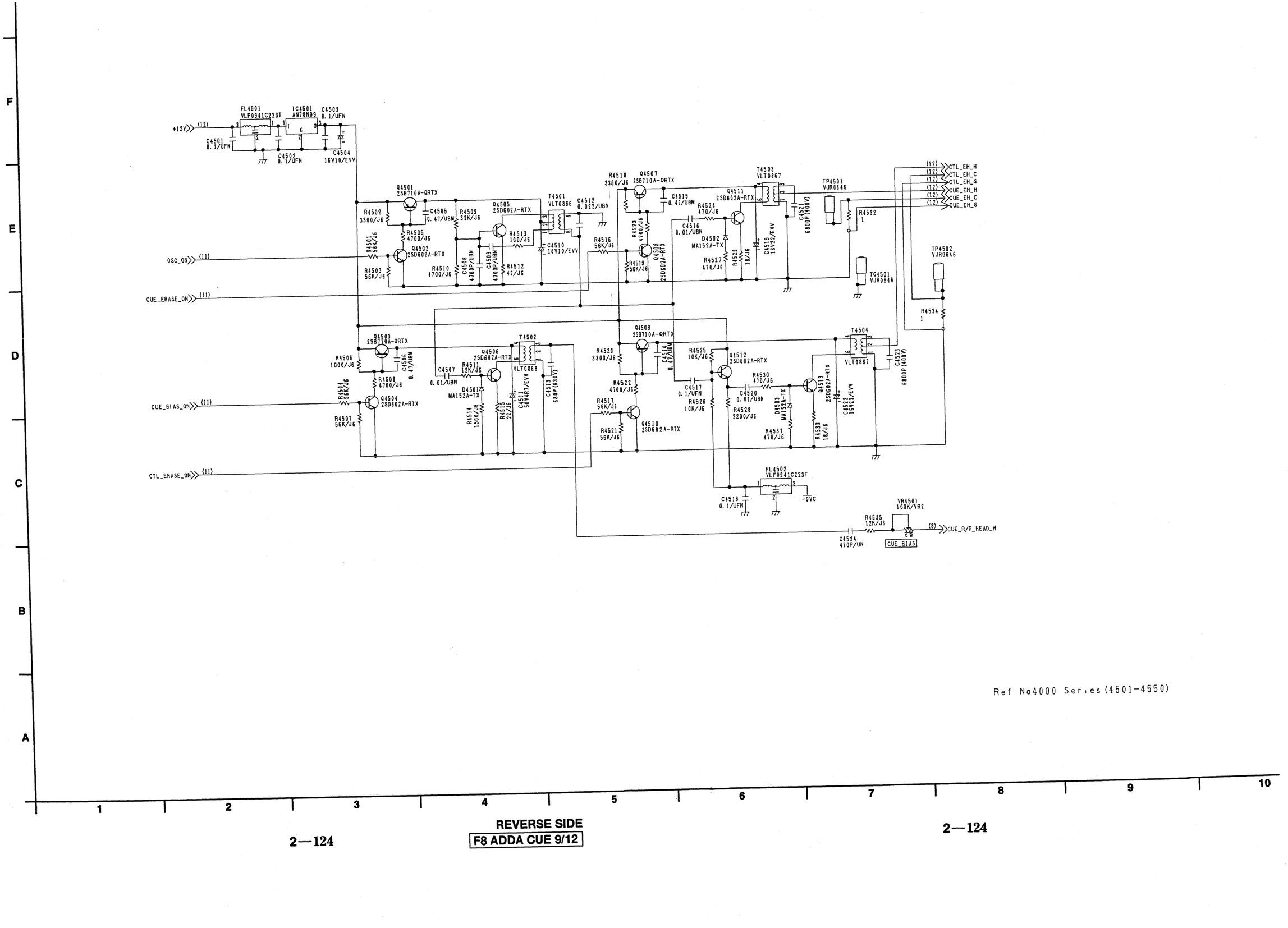
*:VALUE IS DIFFARENT for PAL

	NTSC		PAL	
REF NO.	PART NO	V-L	PART NO	VAL
R4462	VRE0034E182	1800/RE	VRE0034E183	18K/RE
R4470	VRE0034E243	24K/RE	ERJ6GEYJ393V	33K/RE
R4475	PAT	PAT/J6	ERJ6GEYJ332V	3300/J6
R4477	ERJ6GEY0R00V	0/J6	ERJ6GEYJ122V	1200/J6
R4493	VRE0034E273	27K/RE	VRE0034E183	18K/RE

Ref No4000 Series(4461-4500)

2—123

F8 ADDA CUE 10/12 SCHEMATIC DIAGRAM



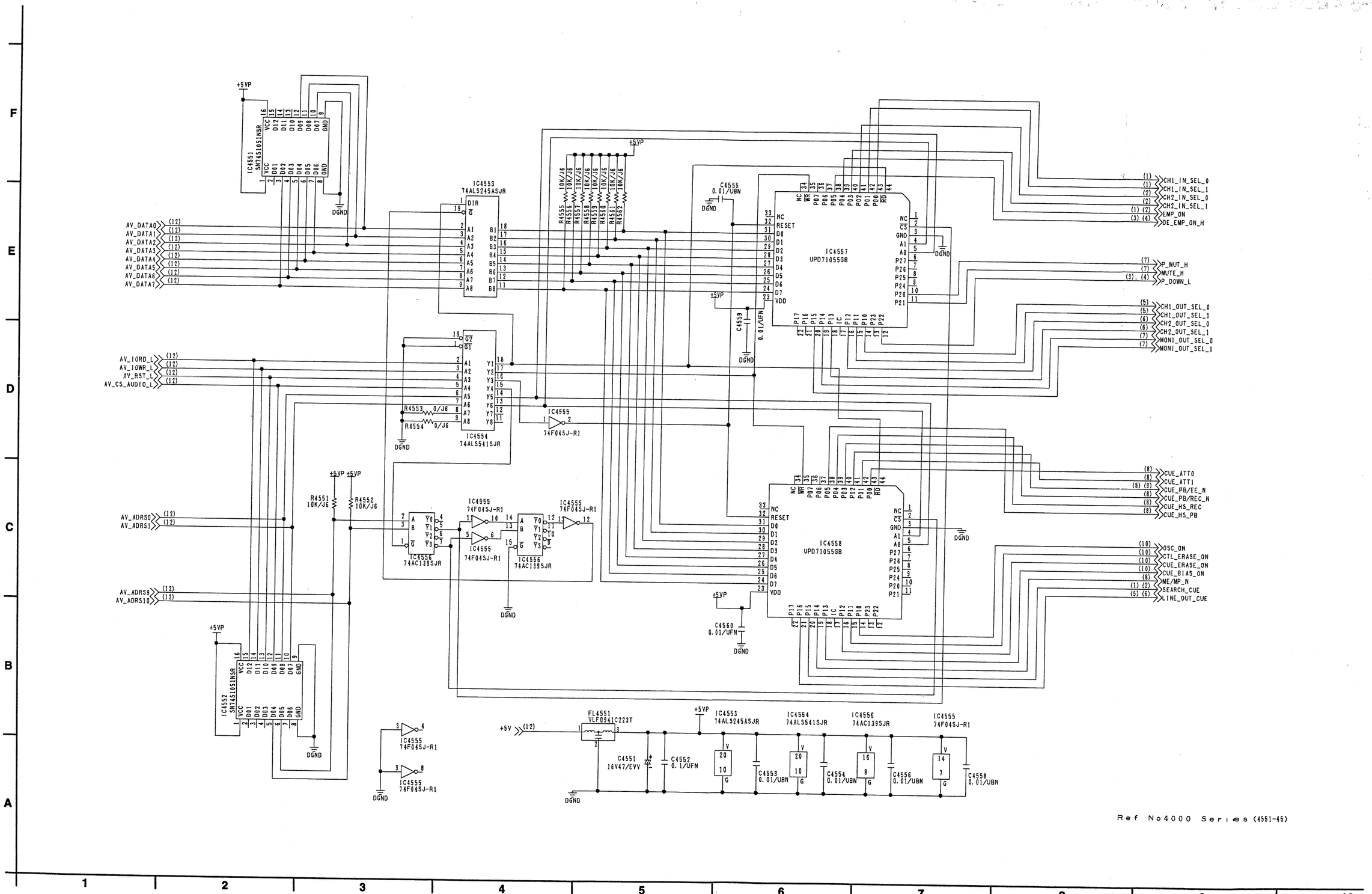
Ref No4000 Series(4501-4550)

REVERSE SIDE

F8 ADDA CUE 9/12

2—124

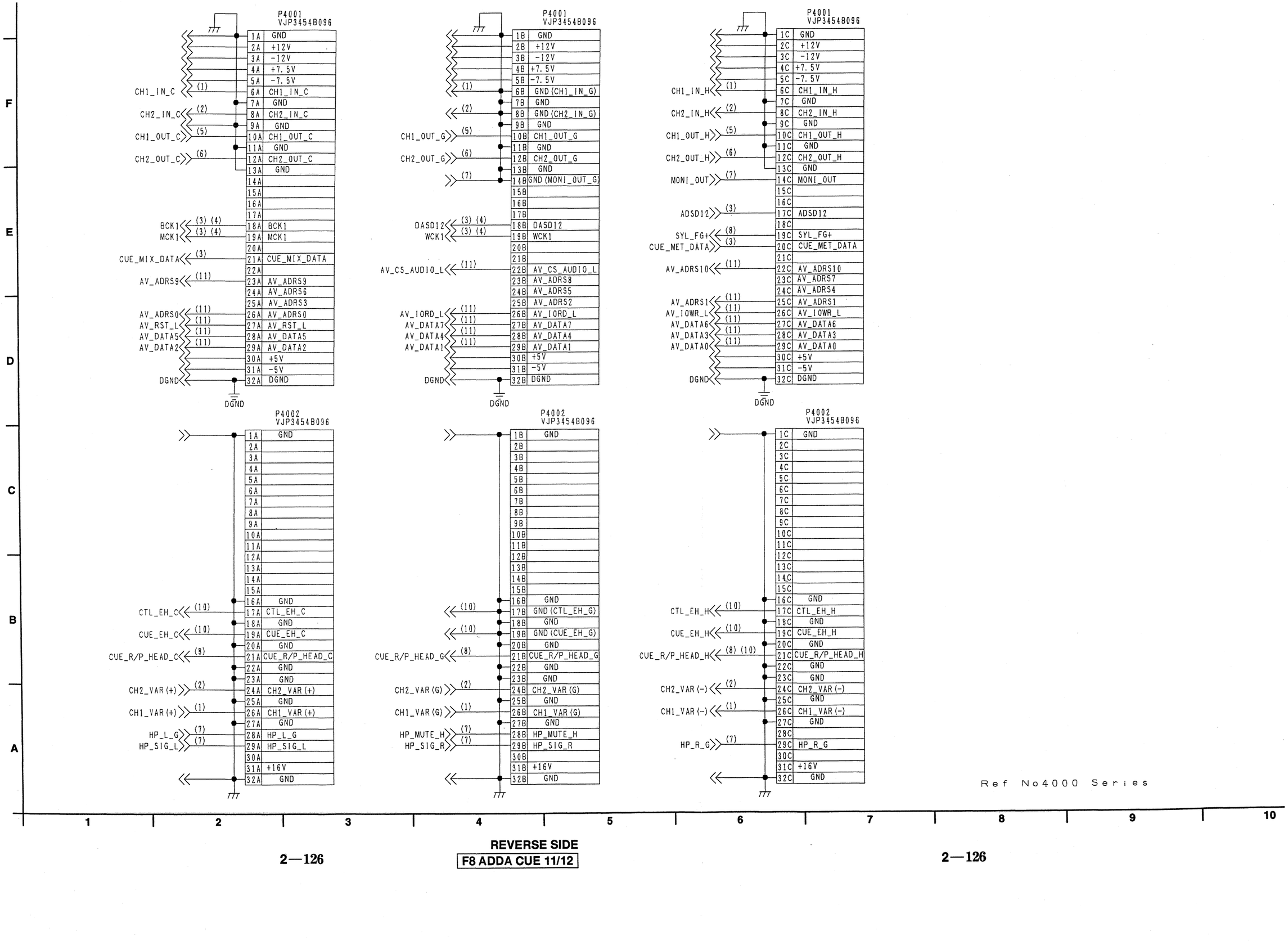
F8 ADDA CUE 11/12 SCHEMATIC DIAGRAM



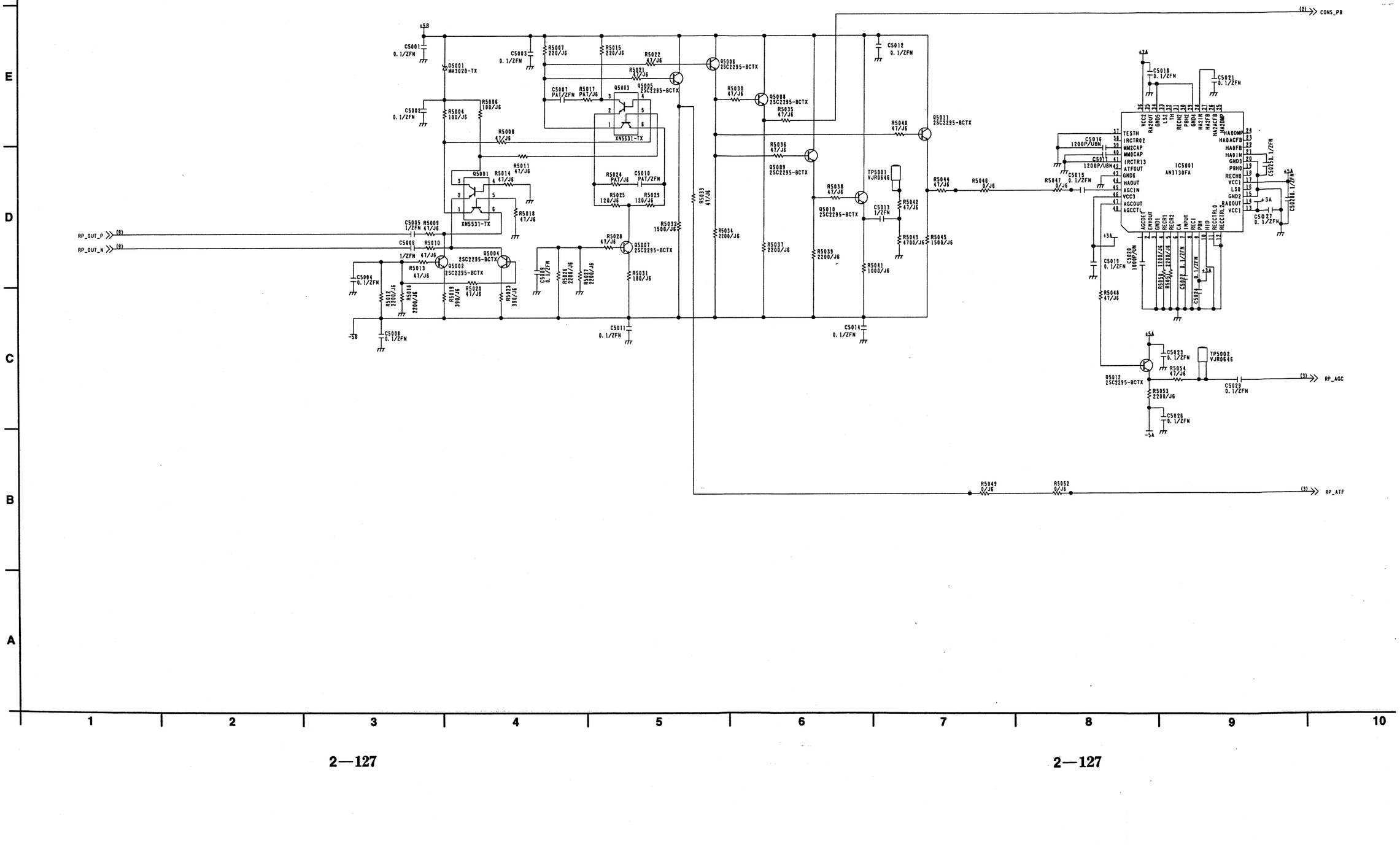
Ref No4000 Series (4551-45)

2—125

F8 ADDA CUE 12/12 SCHEMATIC DIAGRAM

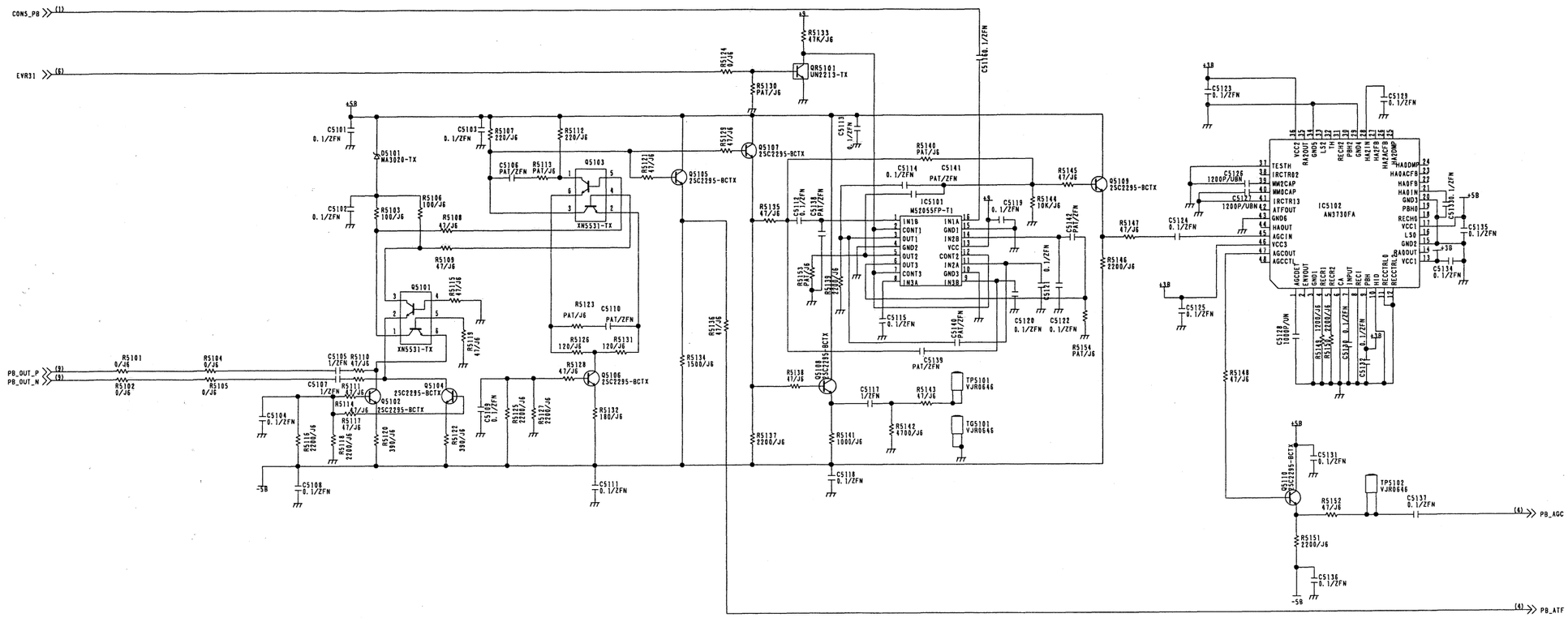


H3 EQ 1/9 SCHEMATIC DIAGRAM

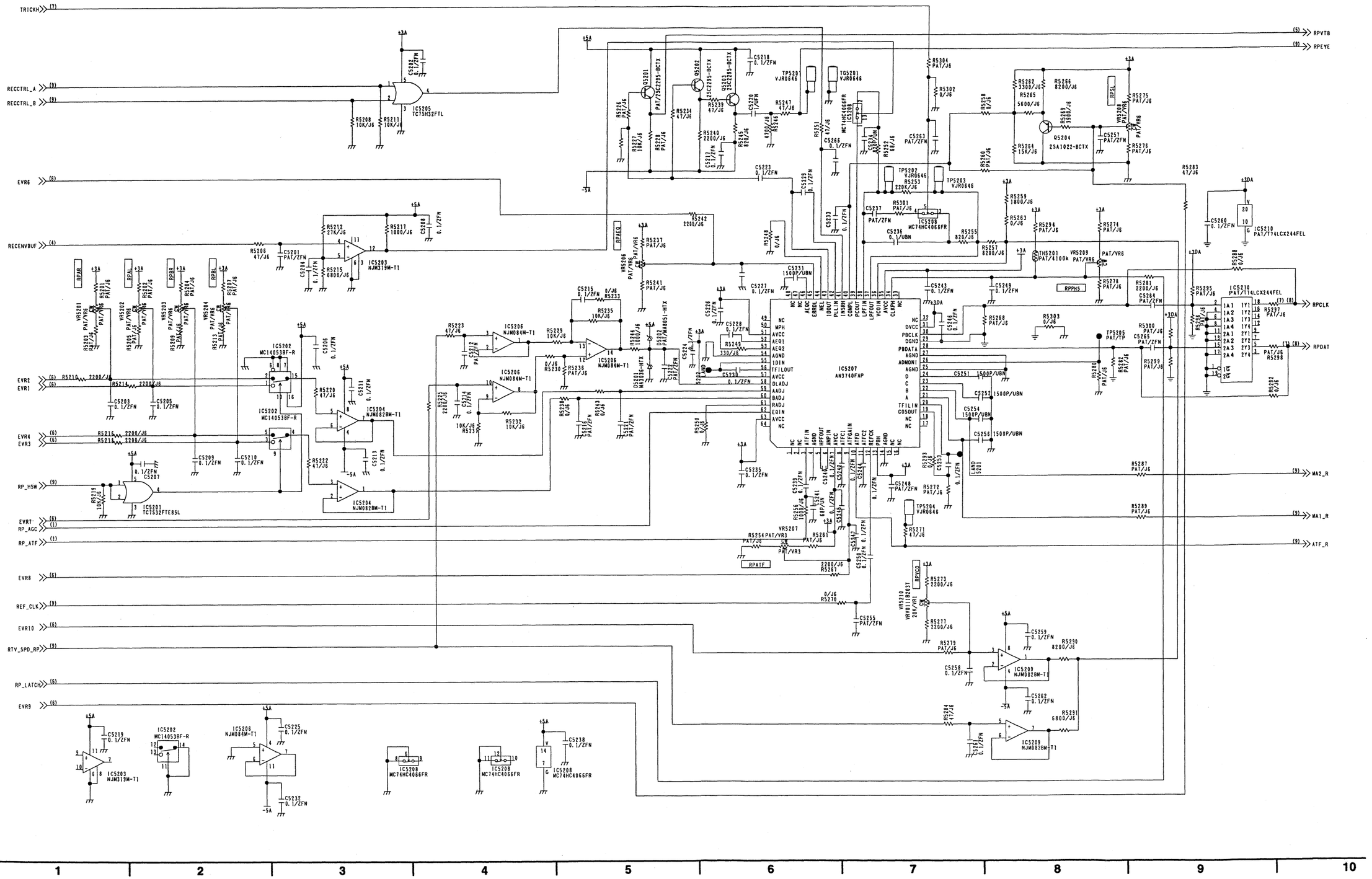


2—127

H3 EQ 2/9 SCHEMATIC DIAGRAM

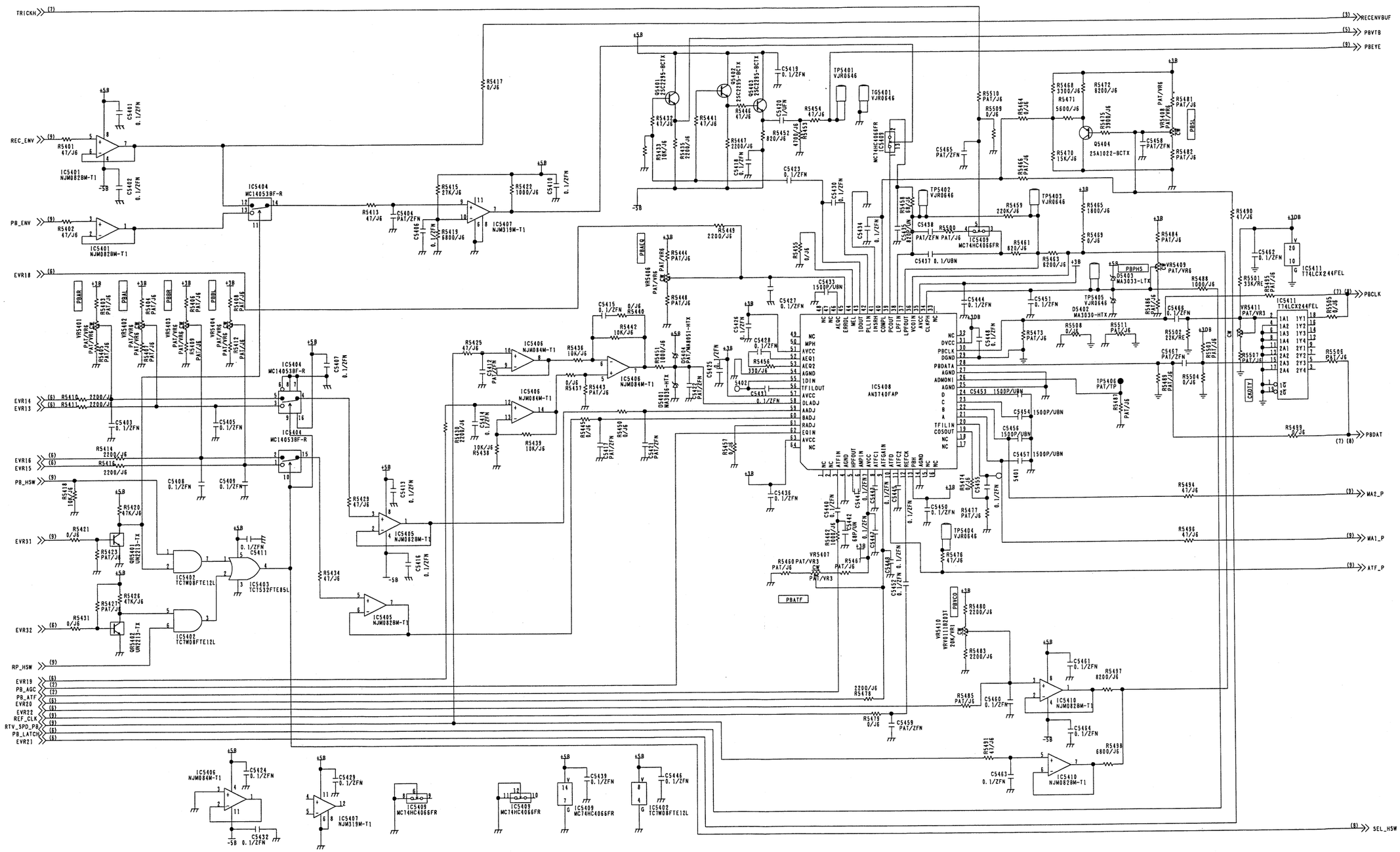


H3 EQ 3/9 SCHEMATIC DIAGRAM

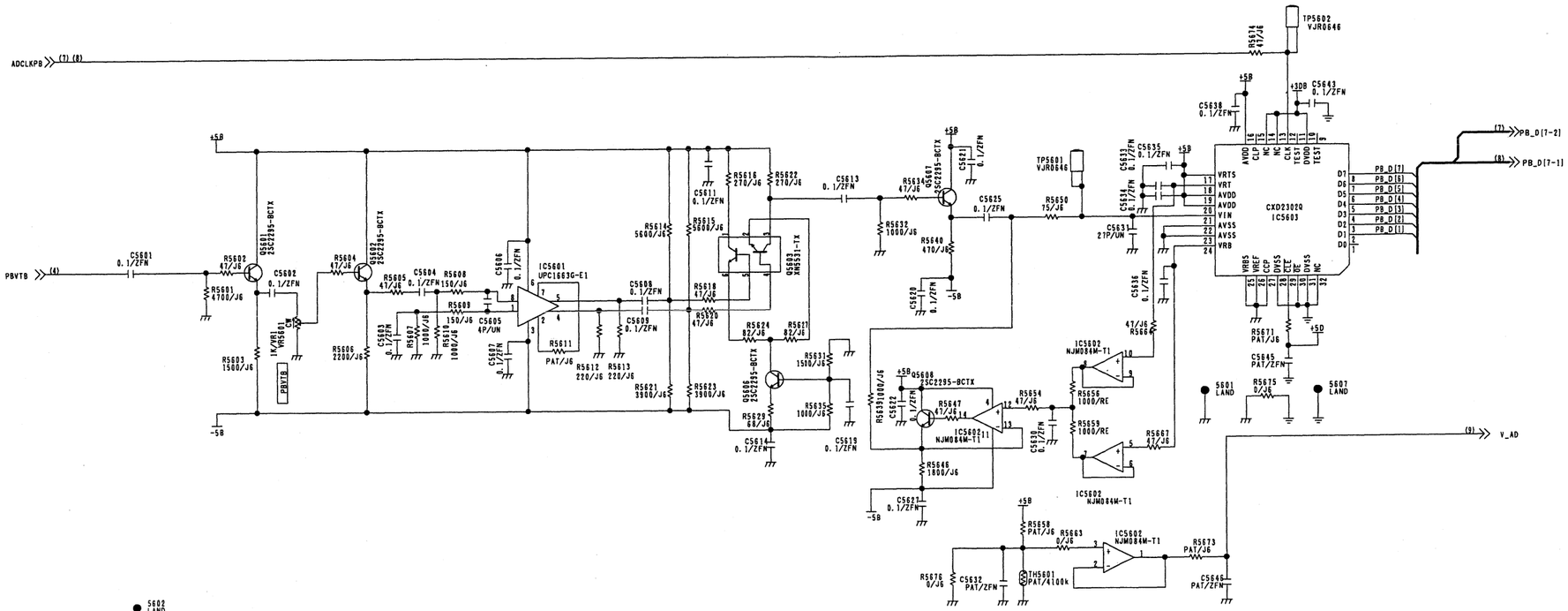


2—129

H3 EQ 4/9 SCHEMATIC DIAGRAM

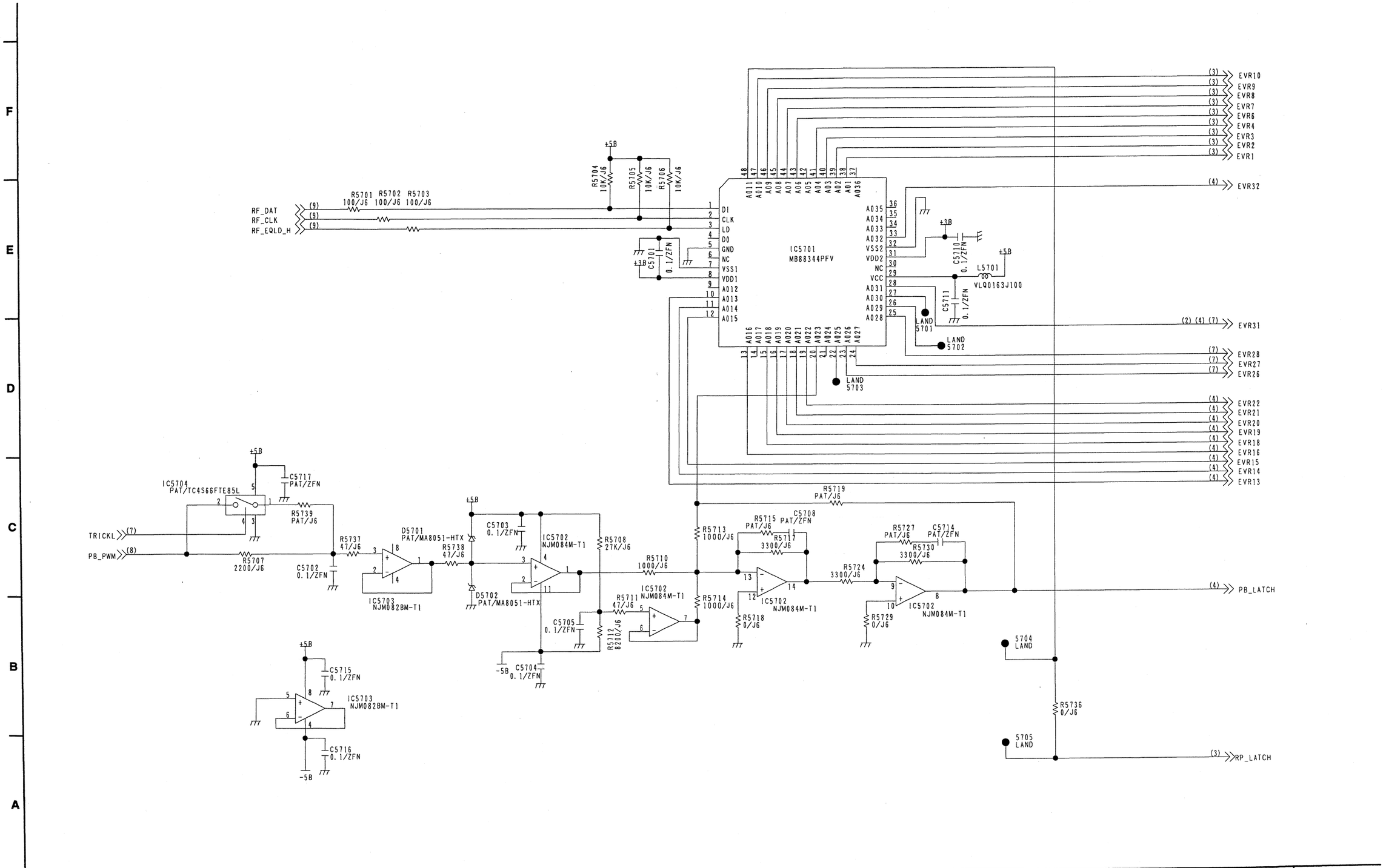


H3 EQ 5/9 SCHEMATIC DIAGRAM

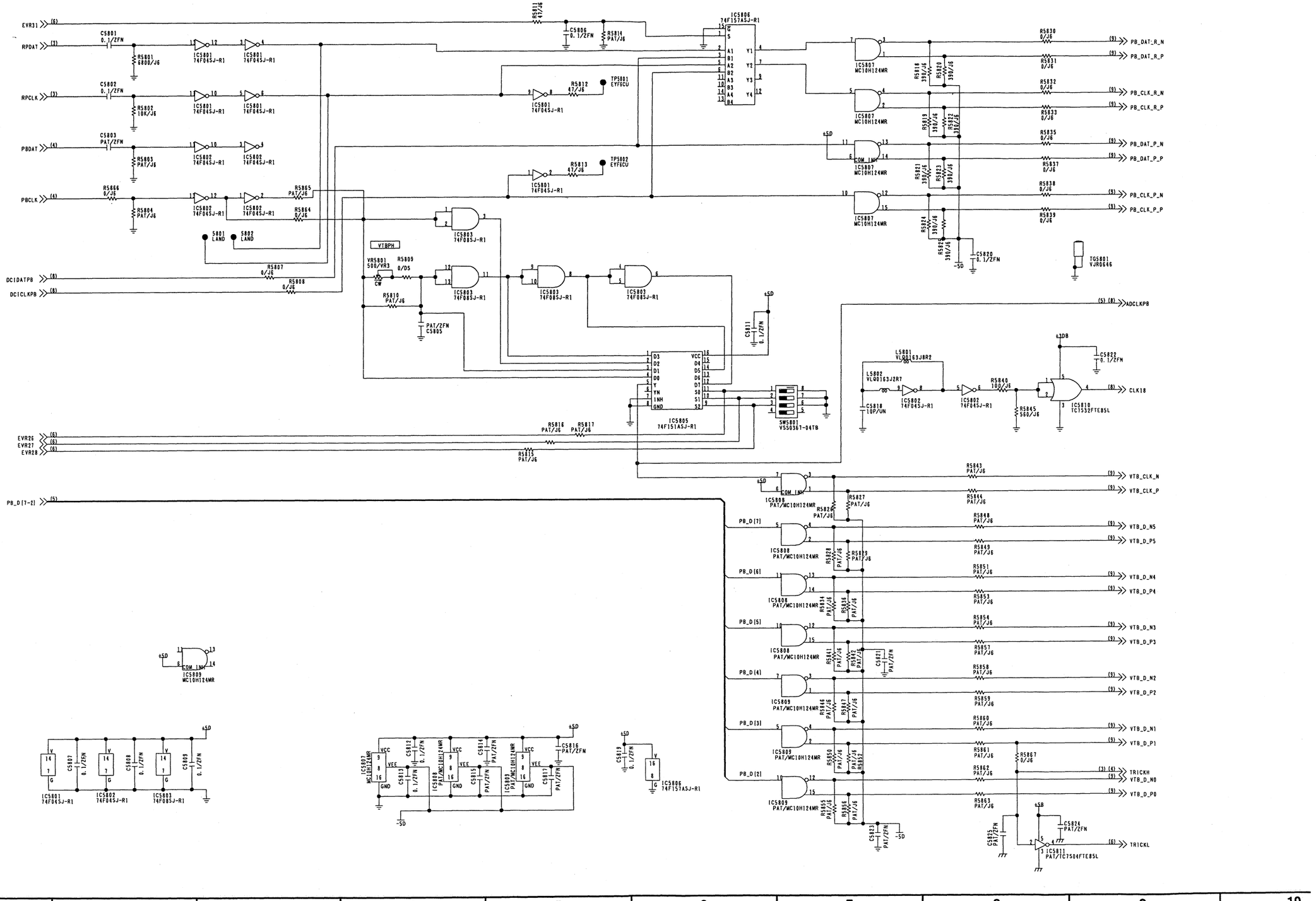


2—131

H3 EQ 6/9 SCHEMATIC DIAGRAM

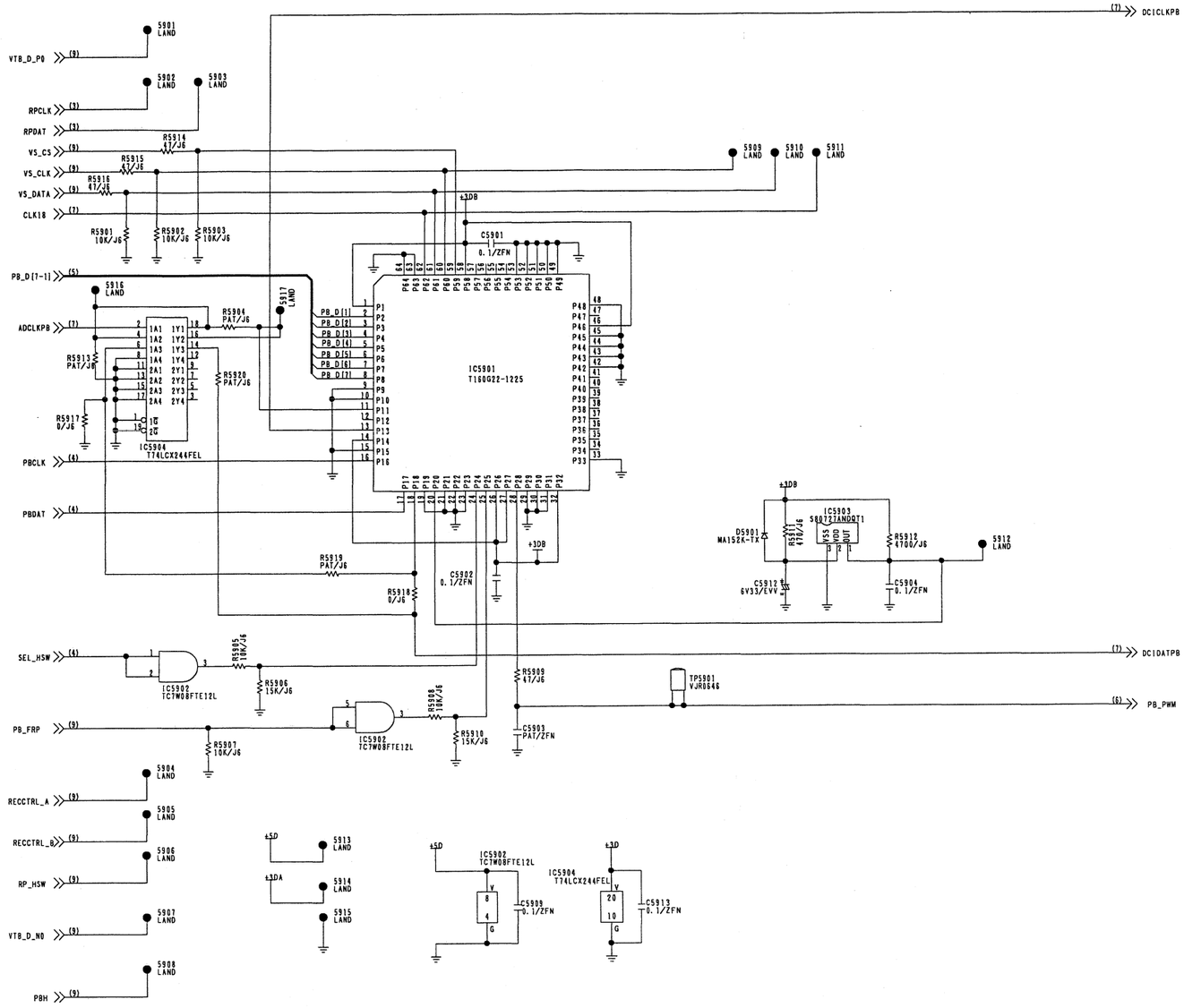


H3 EQ 7/9 SCHEMATIC DIAGRAM

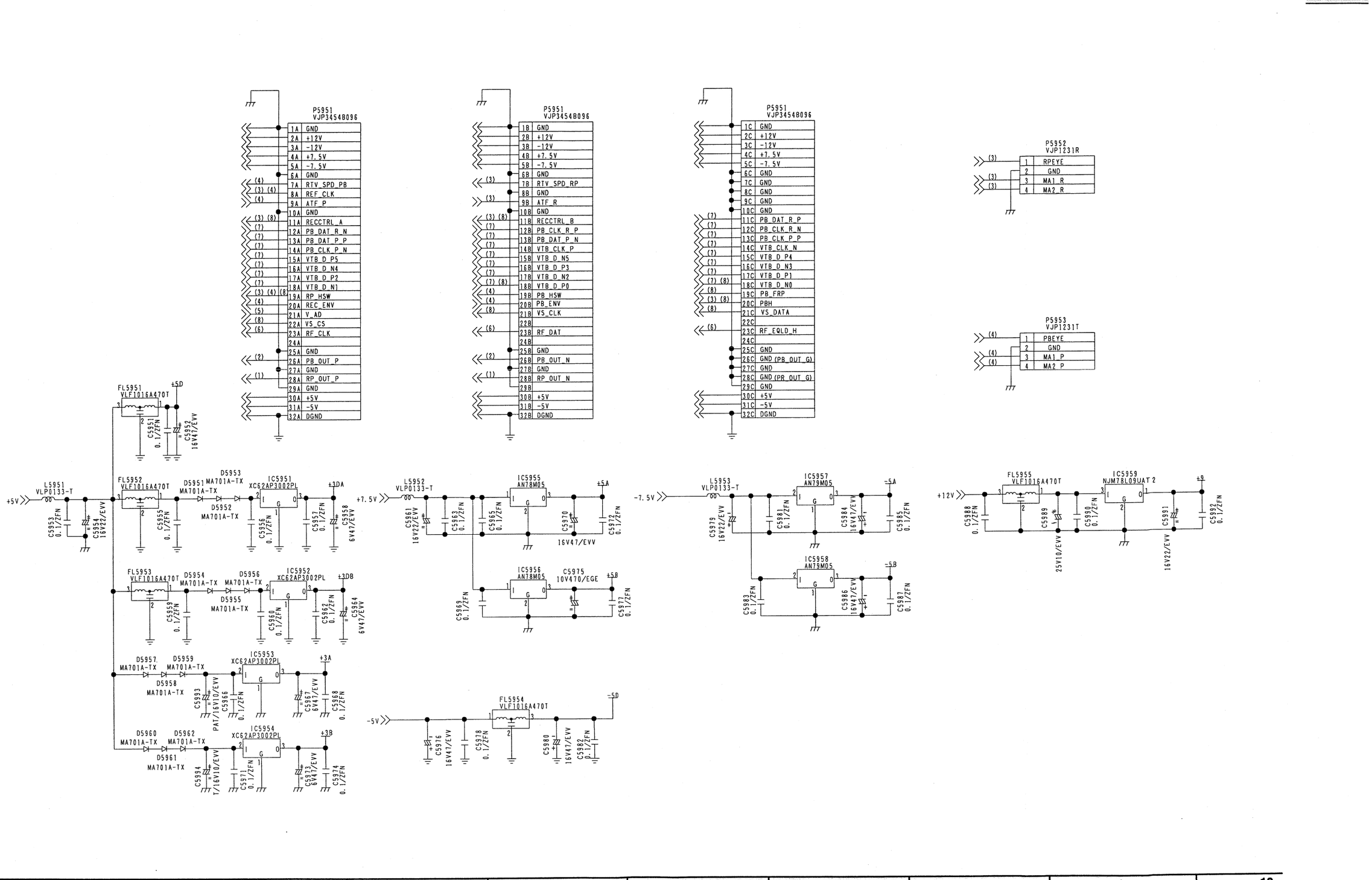


2—133

H3 EQ 8/9 SCHEMATIC DIAGRAM

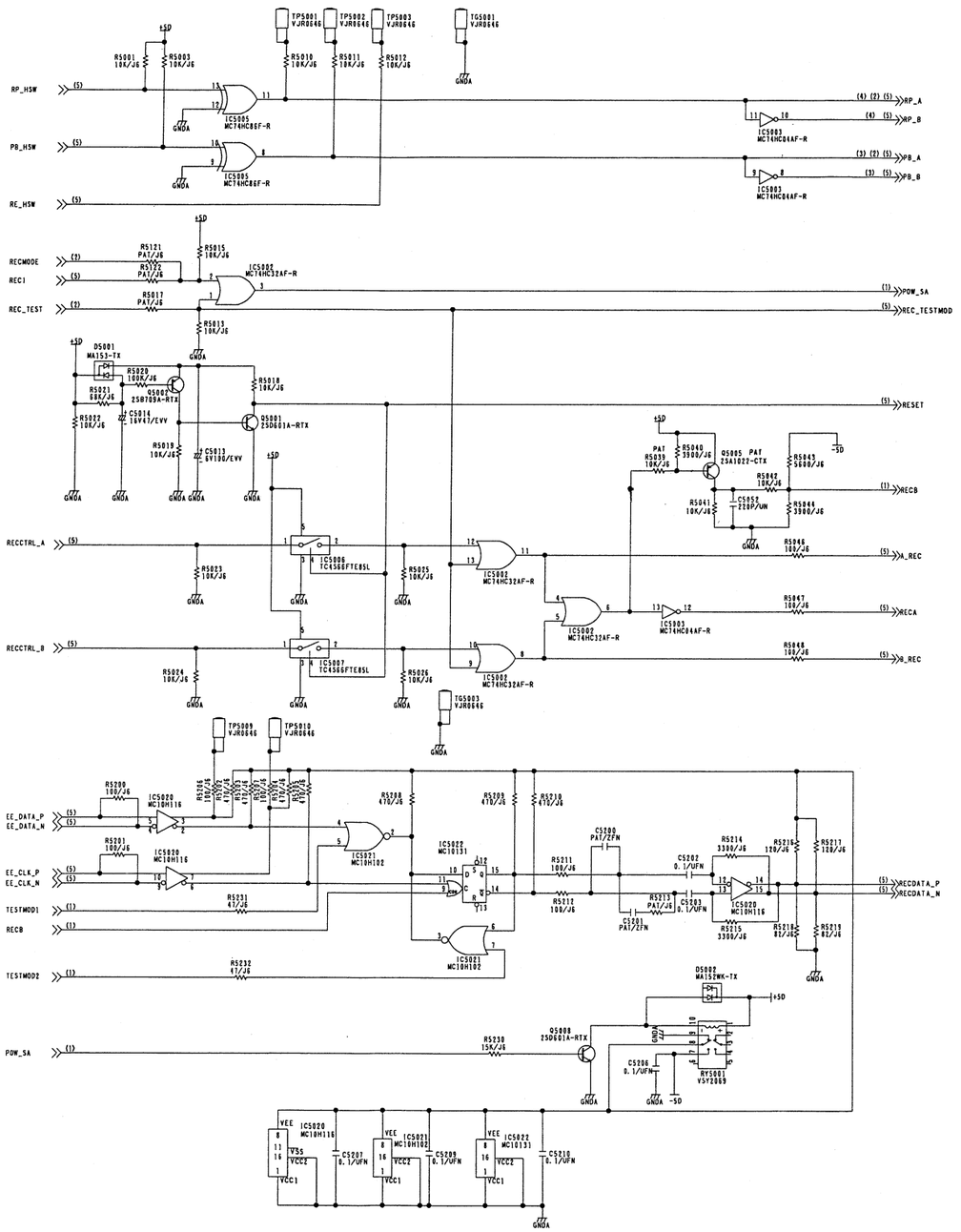


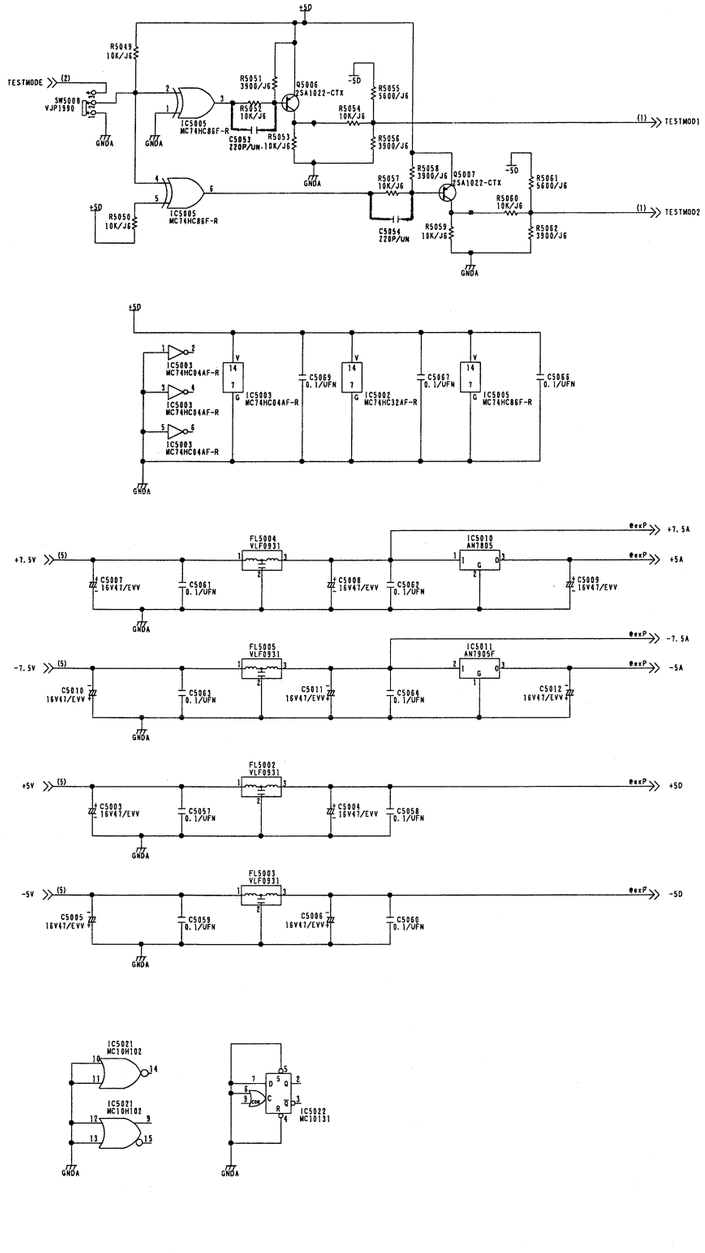
H3 EQ 9/9 SCHEMATIC DIAGRAM



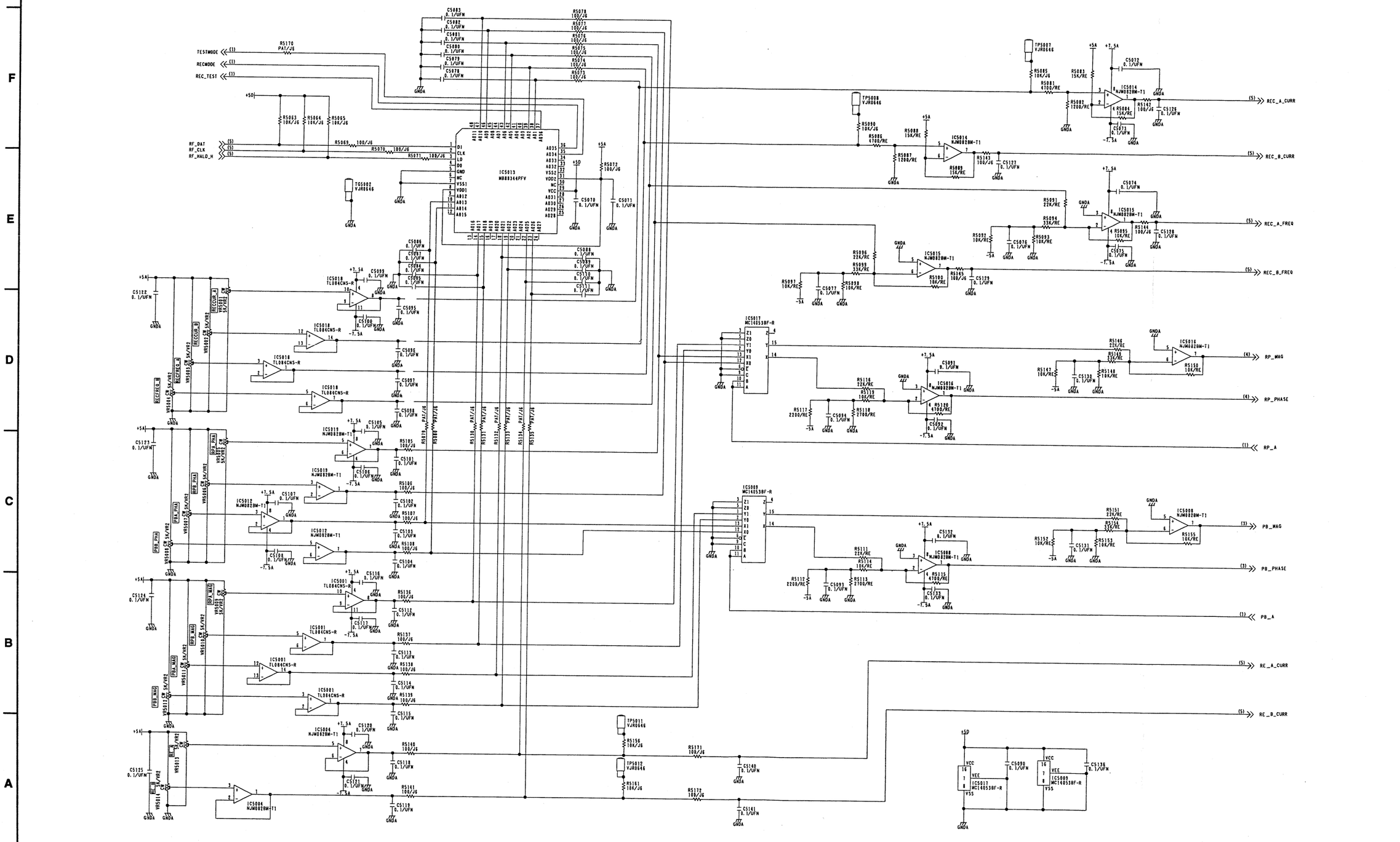
2—135

H4 RF AMP 1/5 SCHEMATIC DIAGRAM



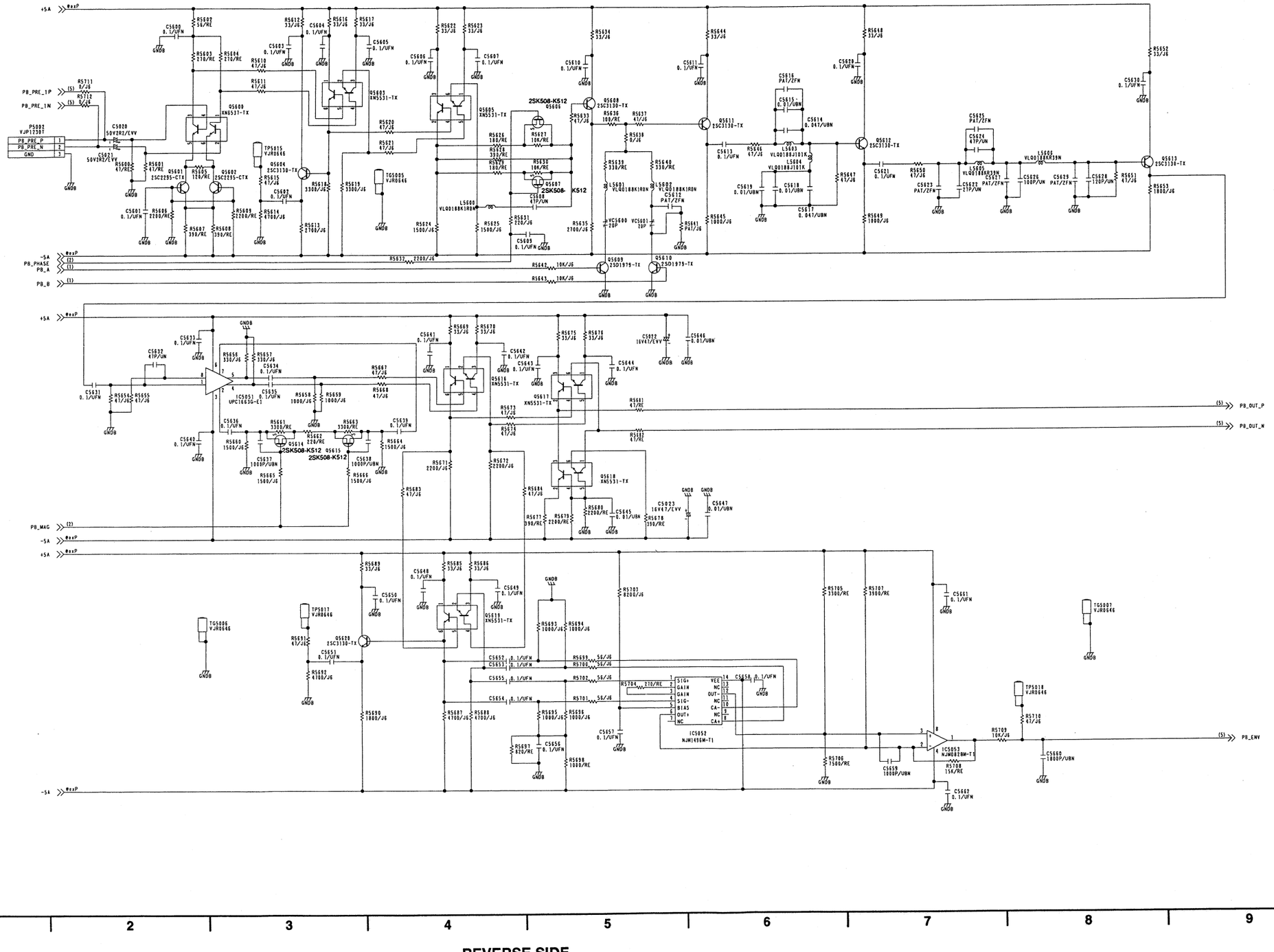


H4 RF AMP 2/5 SCHEMATIC DIAGRAM



2—137

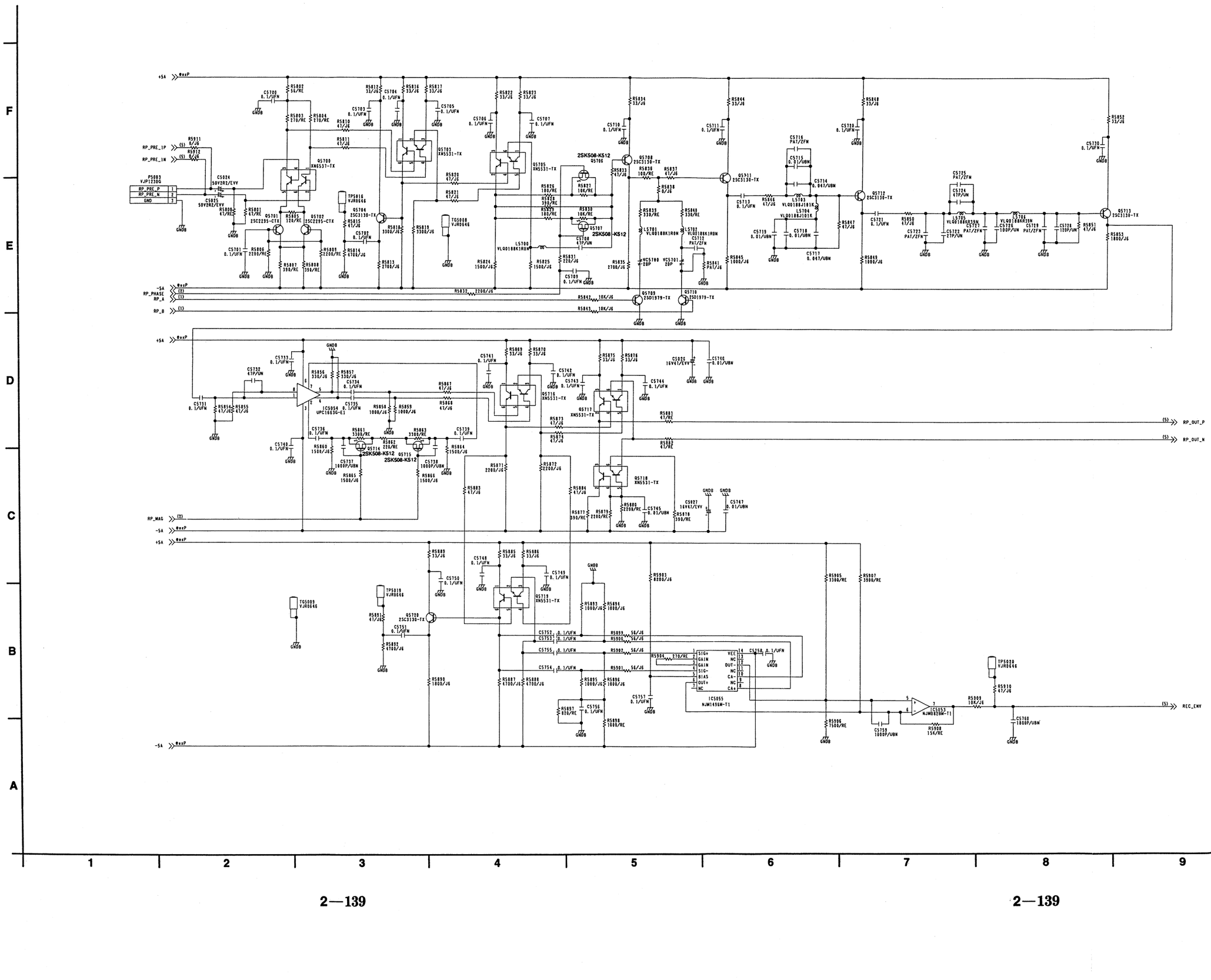
H4 RF AMP 3/5 SCHEMATIC DIAGRAM



REVERSE SIDE
H4 RF AMP 2/5

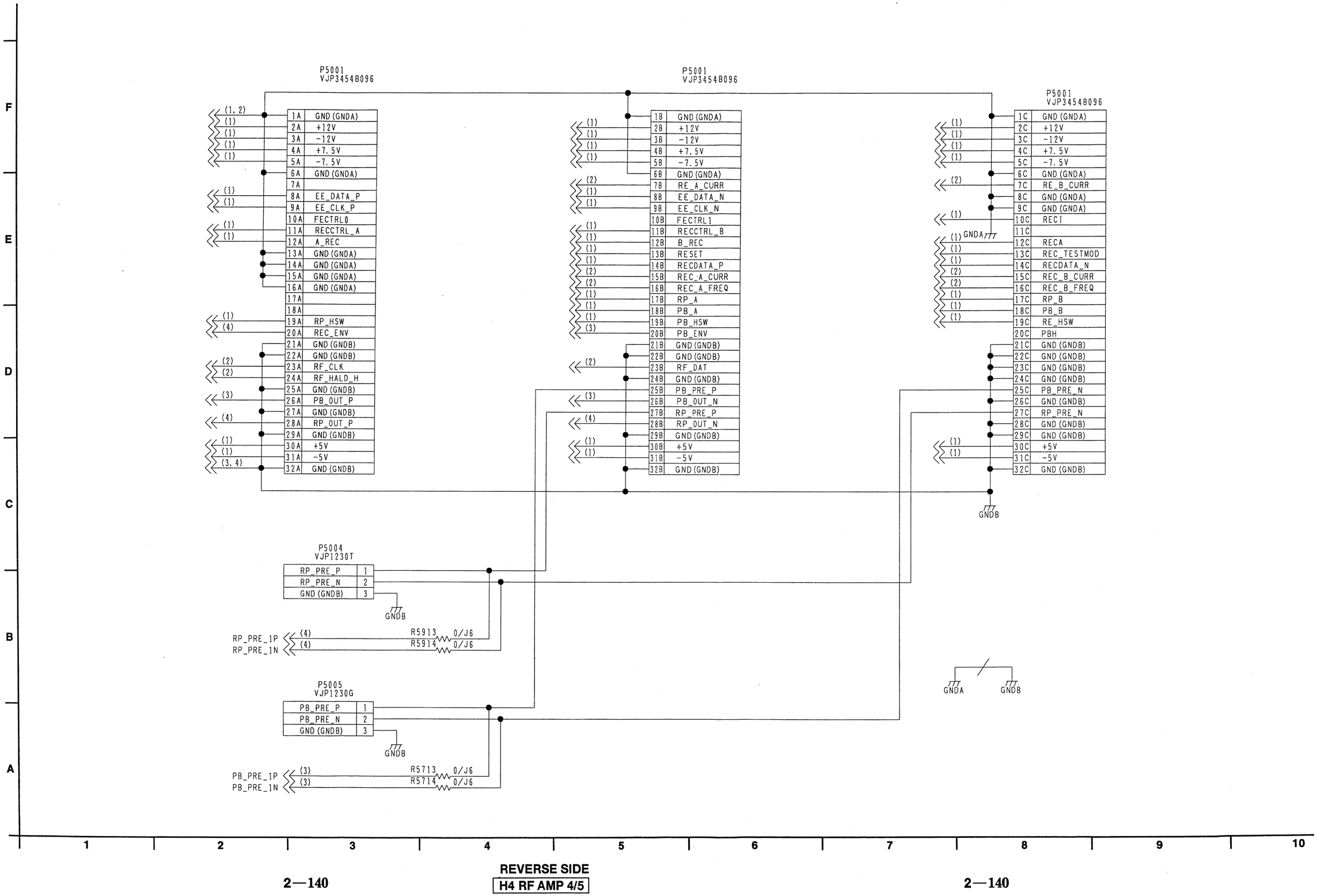
2—138

H4 RF AMP 4/5 SCHEMATIC DIAGRAM

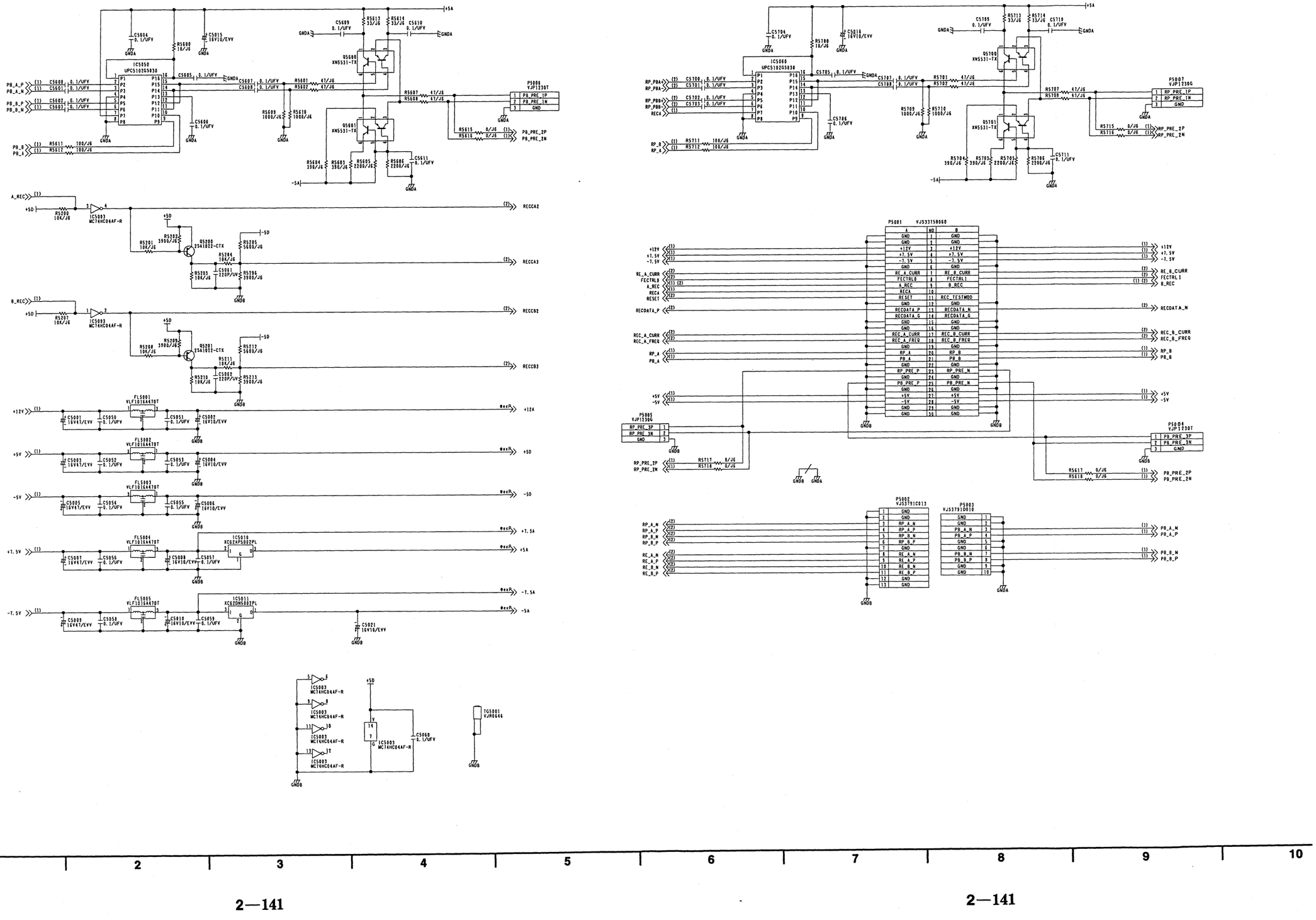


2—139

H4 RF AMP 5/5 SCHEMATIC DIAGRAM

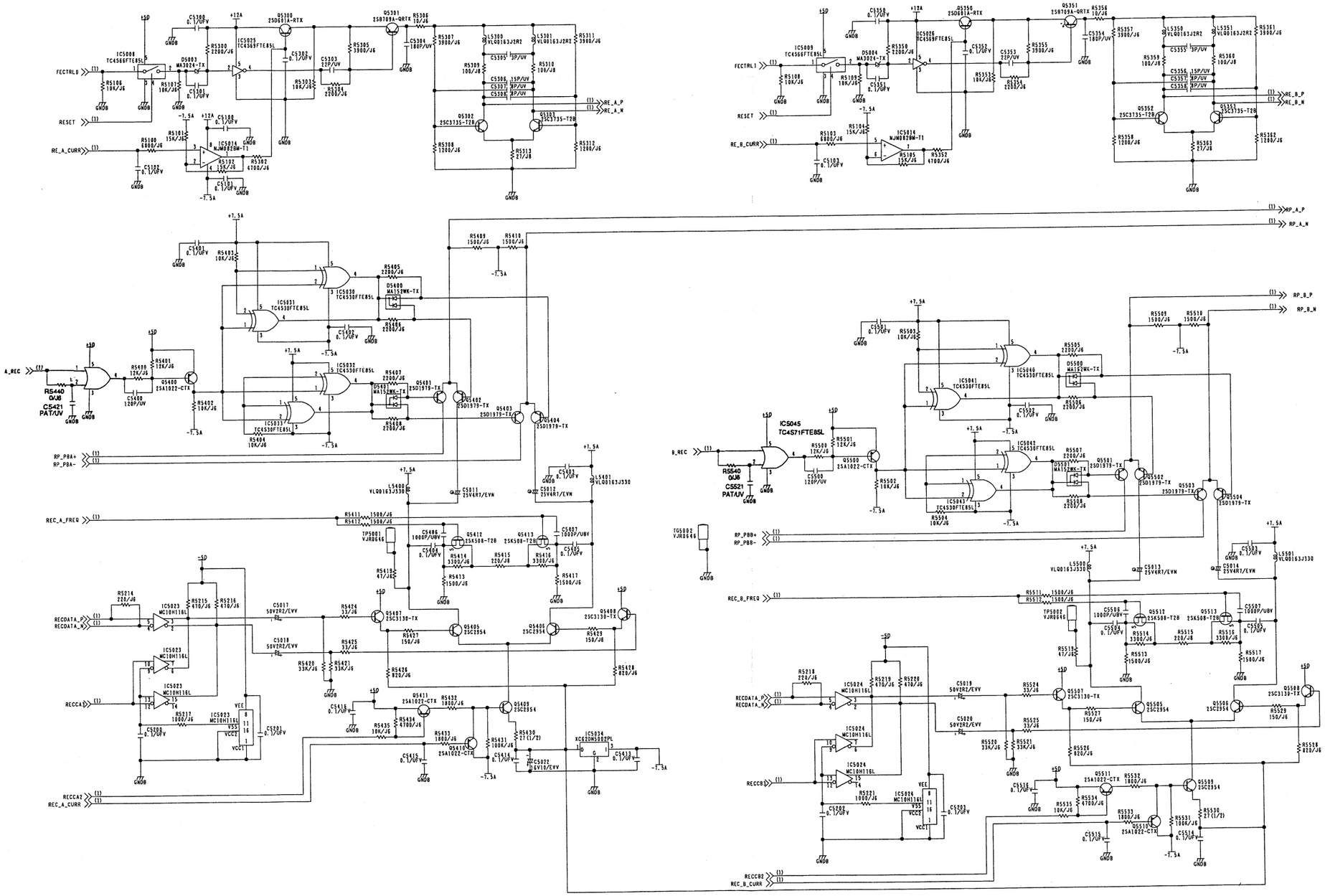


HEAD BUFFER 1/2 SCHEMATIC DIAGRAM



2—141

HEAD BUFFER 2/2 SCHEMATIC DIAGRAM

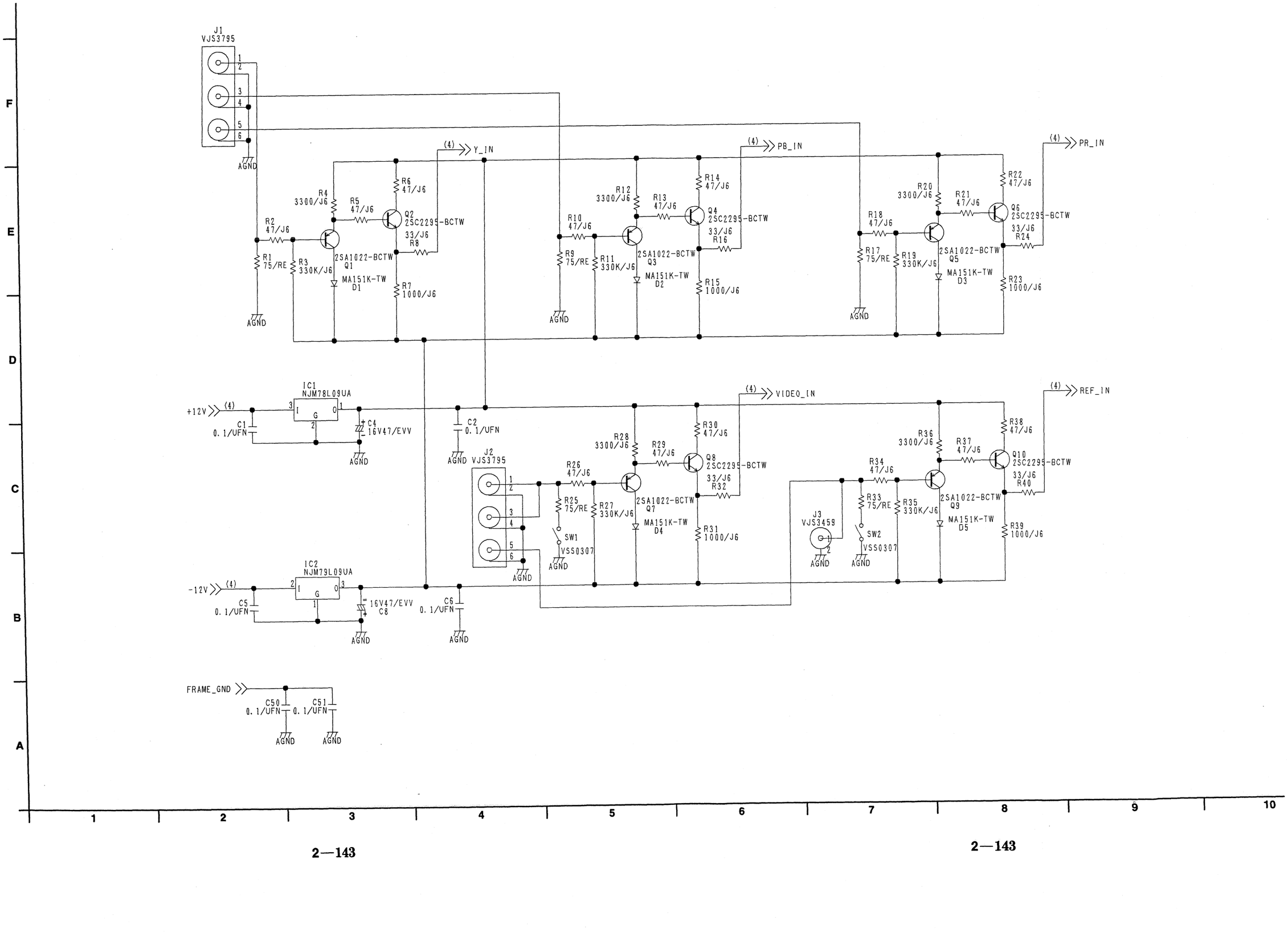


REVERSE SIDE

HEAD BUFFER 1/2

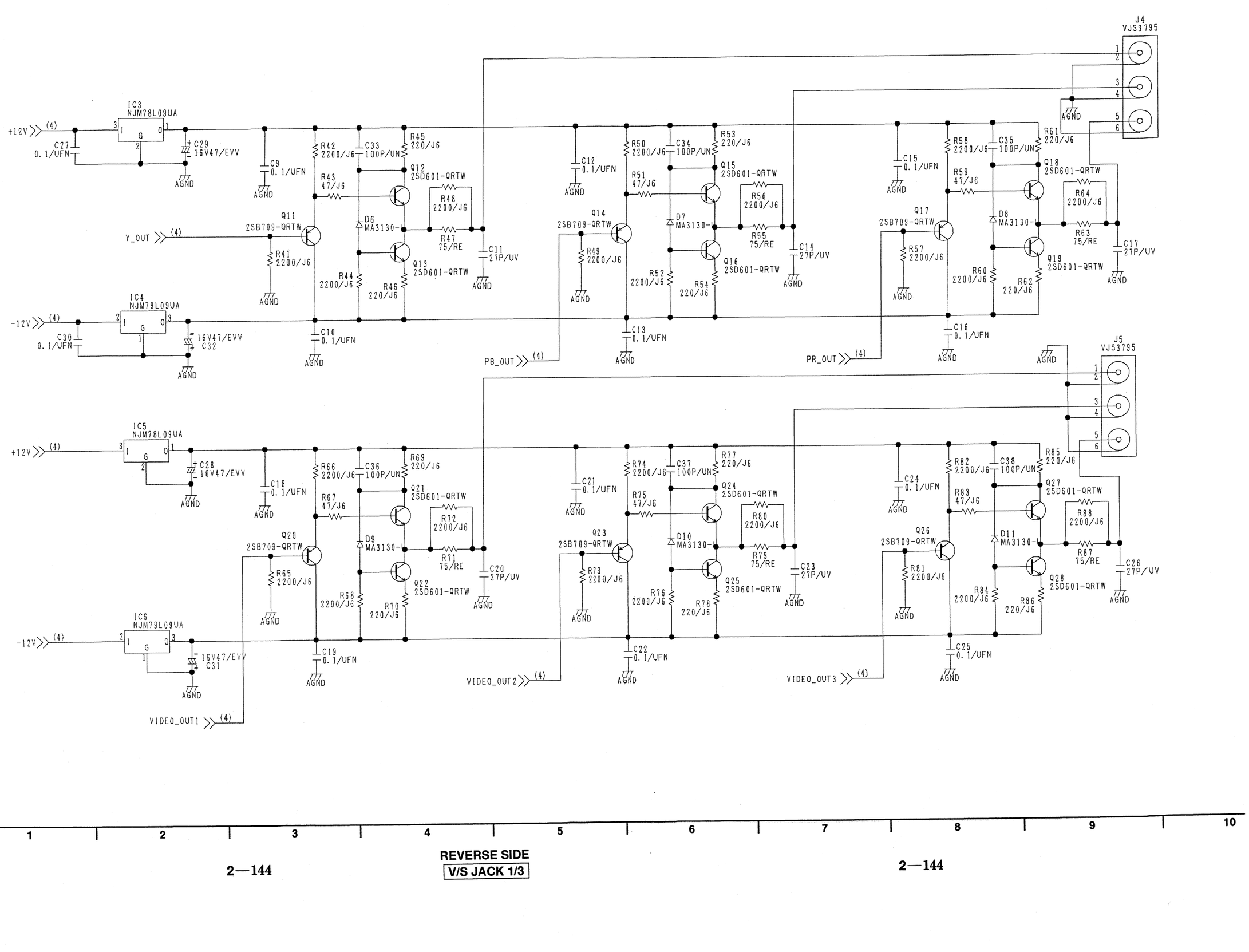
2—142

V/S JACK 1/3 SCHEMATIC DIAGRAM



2—143

V/S JACK 2/3 SCHEMATIC DIAGRAM



REVERSE SIDE
V/S JACK 1/3

2—144

V/S JACK 3/3 SCHEMATIC DIAGRAM

TO V/S_JACK

P1 VJP3375A060

	NO	
CTS	1 2	RTS
RXD	3 4	TXD
DSR	5 6	DTR
STB_CLK16	7 8	232C_SPARE
P_SERIAL_OUT	9 10	SERIAL_CLK
RET_GND	11 12	P_SERIAL_IN
SYS_SC_CORSE_1	13 14	SYS_SC_CORSE_2
SYS_H_PHASE	15 16	SYS_SC_PHASE
C_GAIN	17 18	HUE
VIDEO_GAIN	19 20	SET_UP
+5V	21 22	DGND
TRANSMIT_A_OUT	23 24	TRANSMIT_B_OUT
RECEIVE_A_OUT	25 26	RECEIVE_B_OUT
TRANSMIT_A_IN	27 28	TRANSMIT_B_IN
RECEIVE_A_IN	29 30	RECEIVE_B_IN
+5V	31 32	DGND
-12V	33 34	+12V
+12V	35 36	+12V
PR_OUT	37 38	AGND (PR_OUT_G)
PB_OUT	39 40	AGND (PB_OUT_G)
Y_OUT	41 42	AGND (Y_OUT_G)
VIDEO_OUT3	43 44	AGND (VIDEO_OUT3_G)
VIDEO_OUT2	45 46	AGND (VIDEO_OUT2_G)
VIDEO_OUT1	47 48	AGND (VIDEO_OUT1_G)
AGND	49 50	AGND
REF_IN	51 52	AGND (REF_IN_G)
PR_IN	53 54	AGND (PR_IN_G)
PB_IN	55 56	AGND (PB_IN_G)
Y_IN	57 58	AGND (Y_IN_G)
VIDEO_IN	59 60	AGND (VIDEO_IN_G)

VCC
VLQEL05101J
L1
C250
0.1/UFN
DGND
DGND
AGND
AGND

REMOTE IN/OUT

J14
VJP3414A009

1	DGND
2	TRANSMIT_A_IN
3	RECEIVE_B_IN
4	DGND
5	
6	DGND
7	TRANSMIT_B_IN
8	RECEIVE_A_IN
9	DGND

ENCODER REMOTE

IC209
NJM78L09UAT2
+12V
DGND
+ C251
16V10/EKA
DGND

IC210
NJM79L09UAT2
-12V
DGND
16V10/EKA
C252
DGND

J16
VJP3414A016

1	
2	SET_UP
3	C_GAIN
4	DGND
5	+9V_RMT
6	SYS_H_PHASE
7	SYS_SC_CORSE_2
8	-9V_RMT
9	HUE
10	VIDEO_GAIN
11	RET_GND
12	
13	
14	SYS_SC_PHASE
15	SYS_SC_CORSE_1

RS-232C

J17
VJP3414A025

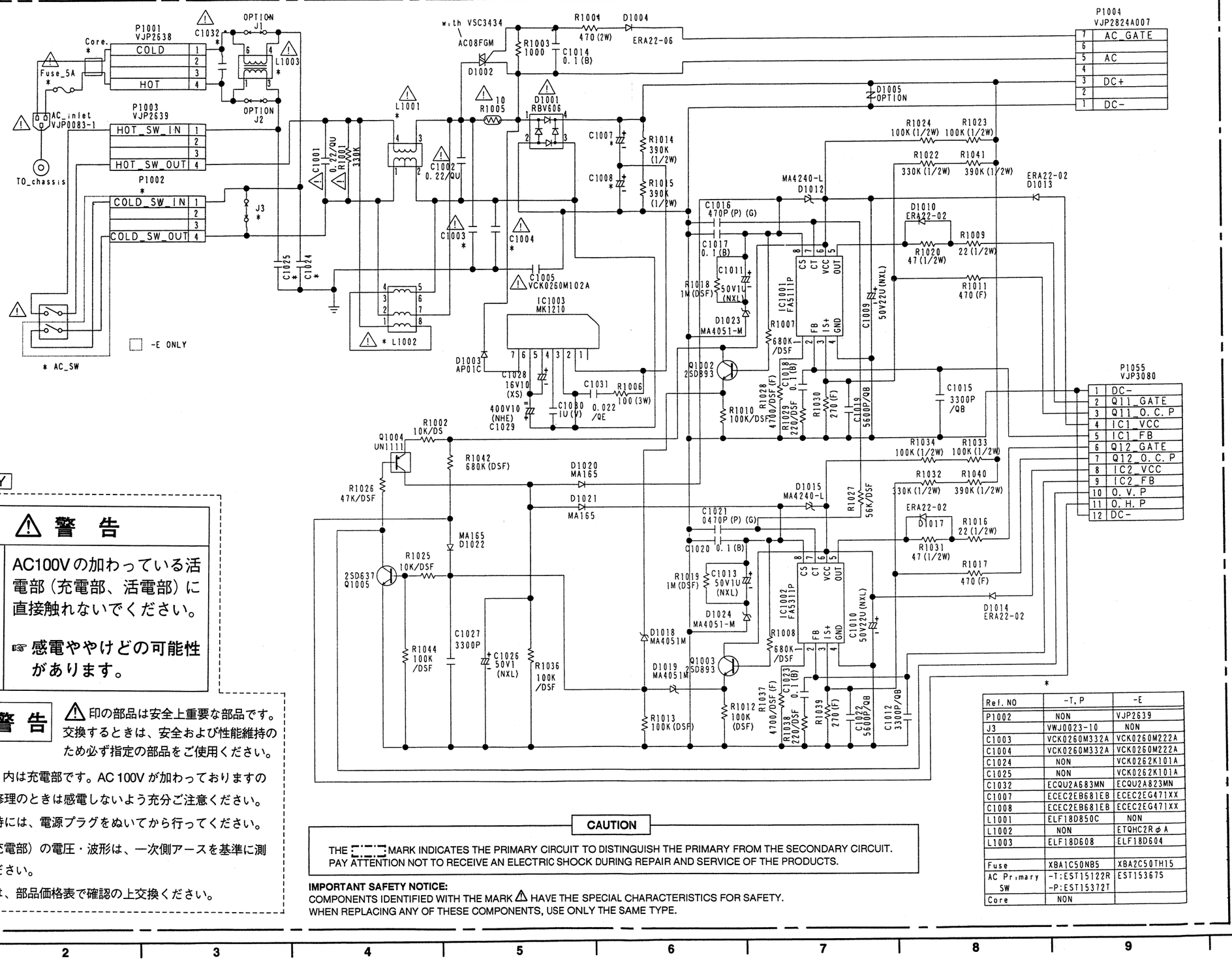
1	DGND
2	TXD
3	RXD
4	RTS
5	CTS
6	DSR
7	DGND
8	232C_SPARE
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	DTR
21	
22	
23	
24	
25	

F E D C B A

1 2 3 4 5 6 7 8 9 10

2—145

POWER 1 SCHEMATIC DIAGRAM



JAPAN ONLY

⚠ 警 告

感電注意

AC100Vの加わっている活電部（充電部、活電部）に直接触れないでください。

☞ 感電ややけどの可能性があります。

① **⚠ 警 告** ⚠印の部品は安全上重要な部品です。交換するときは、安全および性能維持のため必ず指定の部品をご使用ください。

② ┈┈ 内は充電部です。AC 100V が加わっておりますので点検、修理のときは感電しないよう充分ご注意ください。

③ 部品交換時には、電源プラグをぬいてから行ってください。

④ 一次側（充電部）の電圧・波形は、一次側アースを基準に測定してください。

⑤ 部品品番は、部品価格表で確認の上交換ください。

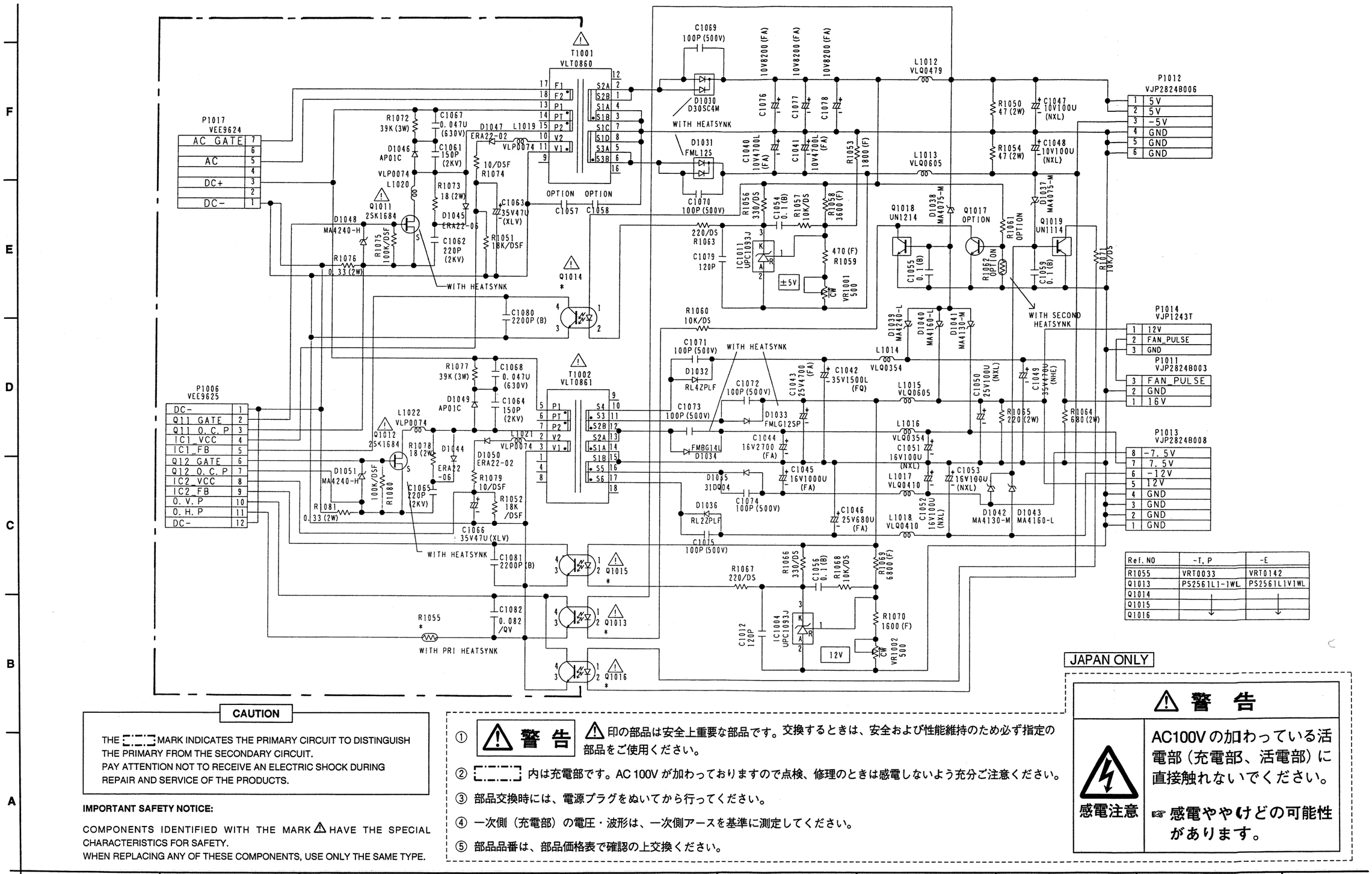
CAUTION

THE ┈┈ MARK INDICATES THE PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM THE SECONDARY CIRCUIT.
PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF THE PRODUCTS.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

Ref. NO	-T, P	-E
P1002	NON	VJP2639
J3	VWJ0023-10	NON
C1003	VCK0260M332A	VCK0260M222A
C1004	VCK0260M332A	VCK0260M222A
C1024	NON	VCK0262K101A
C1025	NON	VCK0262K101A
C1032	ECQU2A683MN	ECQU2A823MN
C1007	ECEC2EB681EB	ECEC2EG471XX
C1008	ECEC2EB681EB	ECEC2EG471XX
L1001	ELF18D850C	NON
L1002	NON	ETQHC2R ϕ A
L1003	ELF18D608	ELF18D604
Fuse	XBA1C50NB5	XBA2C50TH15
AC Primary SW	-T:EST15122R -P:EST15372T	EST15367S
Core	NON	

POWER 2 SCHEMATIC DIAGRAM



Ref. NO	-T, P	-E
R1055	VRT0033	VRT0142
Q1013	PS2561L1-1WL	PS2561L1V1WL
Q1014		
Q1015		
Q1016		

CAUTION

THE ⋯ MARK INDICATES THE PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM THE SECONDARY CIRCUIT.
PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF THE PRODUCTS.

IMPORTANT SAFETY NOTICE:

COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

① ⚠ 警 告 ⚠印の部品は安全上重要な部品です。交換するときは、安全および性能維持のため必ず指定の部品をご使用ください。

② ⋯ 内は充電部です。AC 100V が加わっておりますので点検、修理のときは感電しないよう充分ご注意ください。

③ 部品交換時には、電源プラグをぬいてから行ってください。

④ 一次側（充電部）の電圧・波形は、一次側アースを基準に測定してください。

⑤ 部品品番は、部品価格表で確認の上交換ください。

JAPAN ONLY

⚠ 警 告

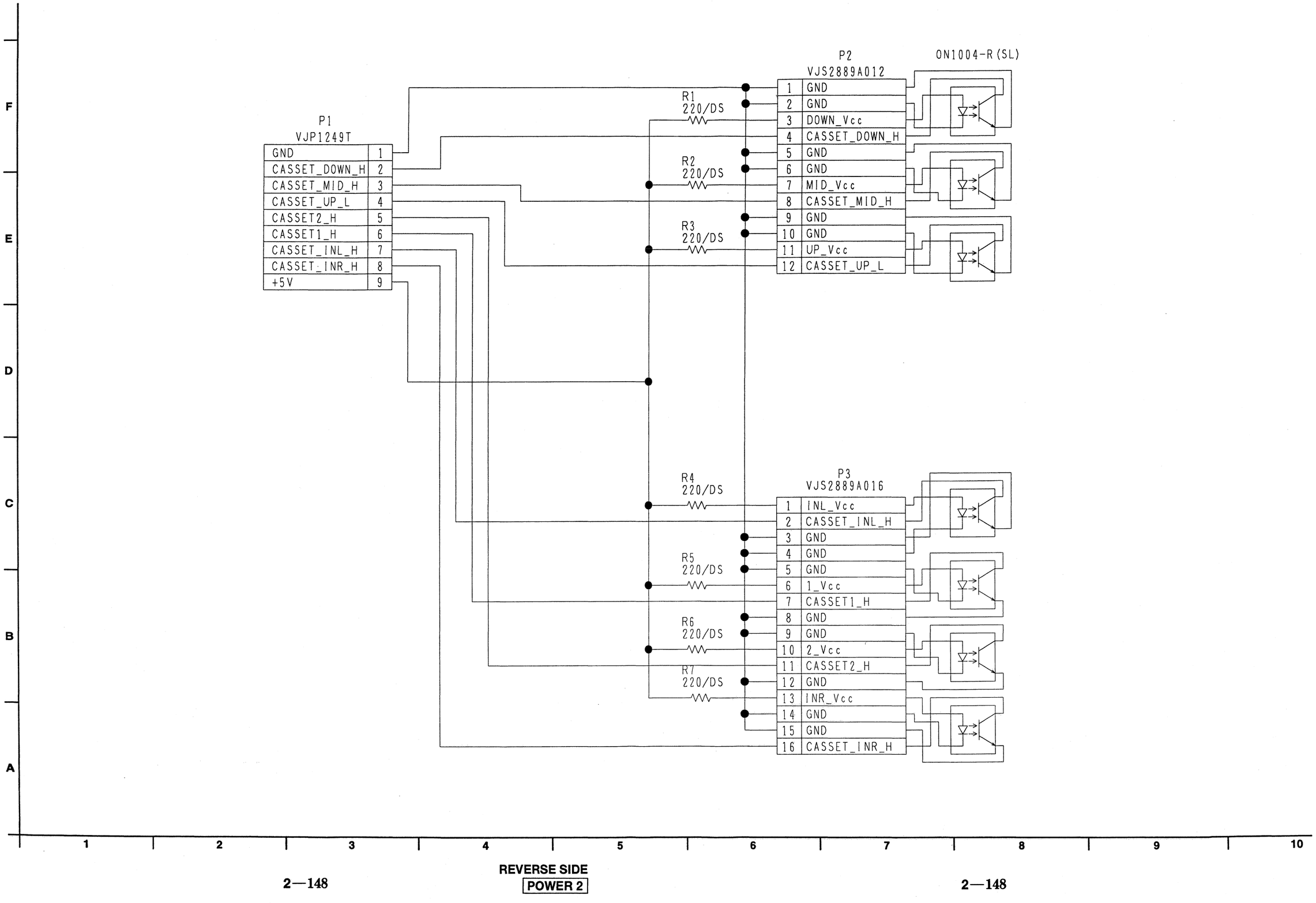
感電注意

AC100V の加わっている活電部（充電部、活電部）に直接触れないでください。

☞ 感電ややけどの可能性があります。

2—147

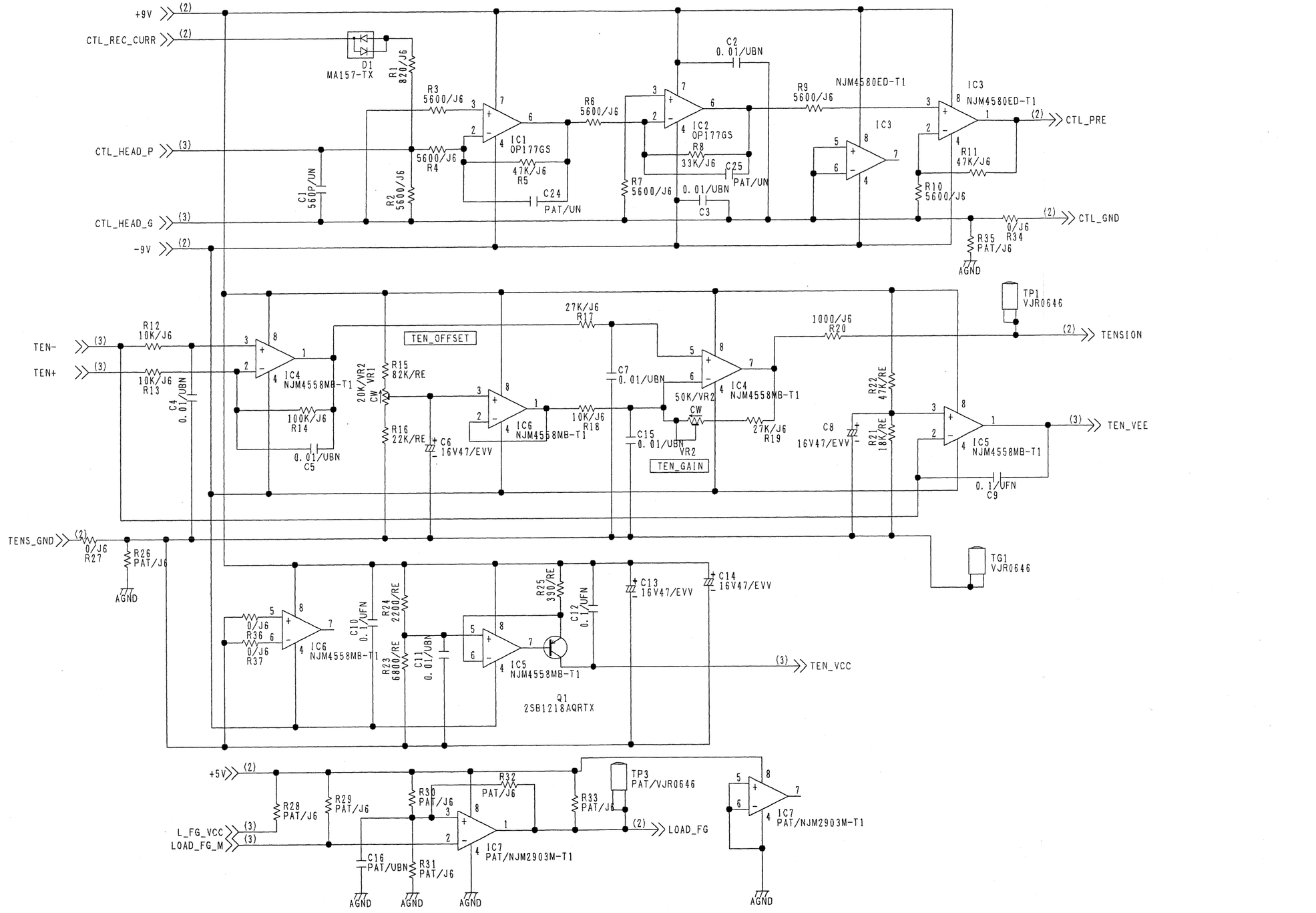
CARRIAGE SCHEMATIC DIAGRAM



REVERSE SIDE
POWER 2

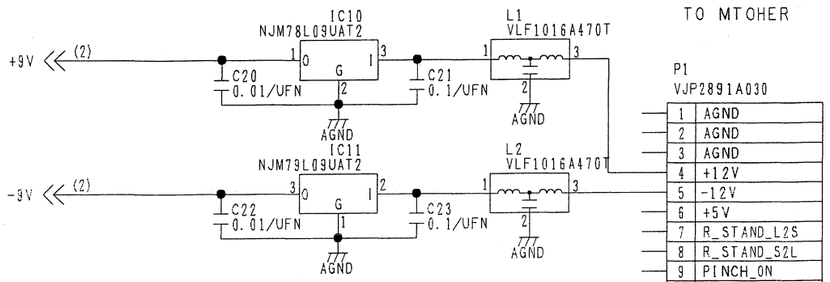
2—148

MECHA IF 1/4 SCHEMATIC DIAGRAM



2—149

MECHA IF 2/4 SCHEMATIC DIAGRAM



TO MTOHER

P1
VJP2891A030

1	AGND
2	AGND
3	AGND
4	+12V
5	-12V
6	+5V
7	R_STAND_L2S
8	R_STAND_S2L
9	PINCH_ON
10	PINCH_OFF
11	S_BRAKE_ON
12	S_BRAKE_OFF
13	T_BRAKE_ON
14	T_BRAKE_OFF
15	M_STOPPER_OFF
16	M_STOPPER_ON
17	TRM1
18	TRM2
19	TRM3
20	RM1
21	SRM2
22	SRM3
23	CAM1
24	CAM2
25	CAM3
26	CYL_M1
27	CYL_M2
28	CYL_M3
29	LOAD_FG
30	CLE_ON_H

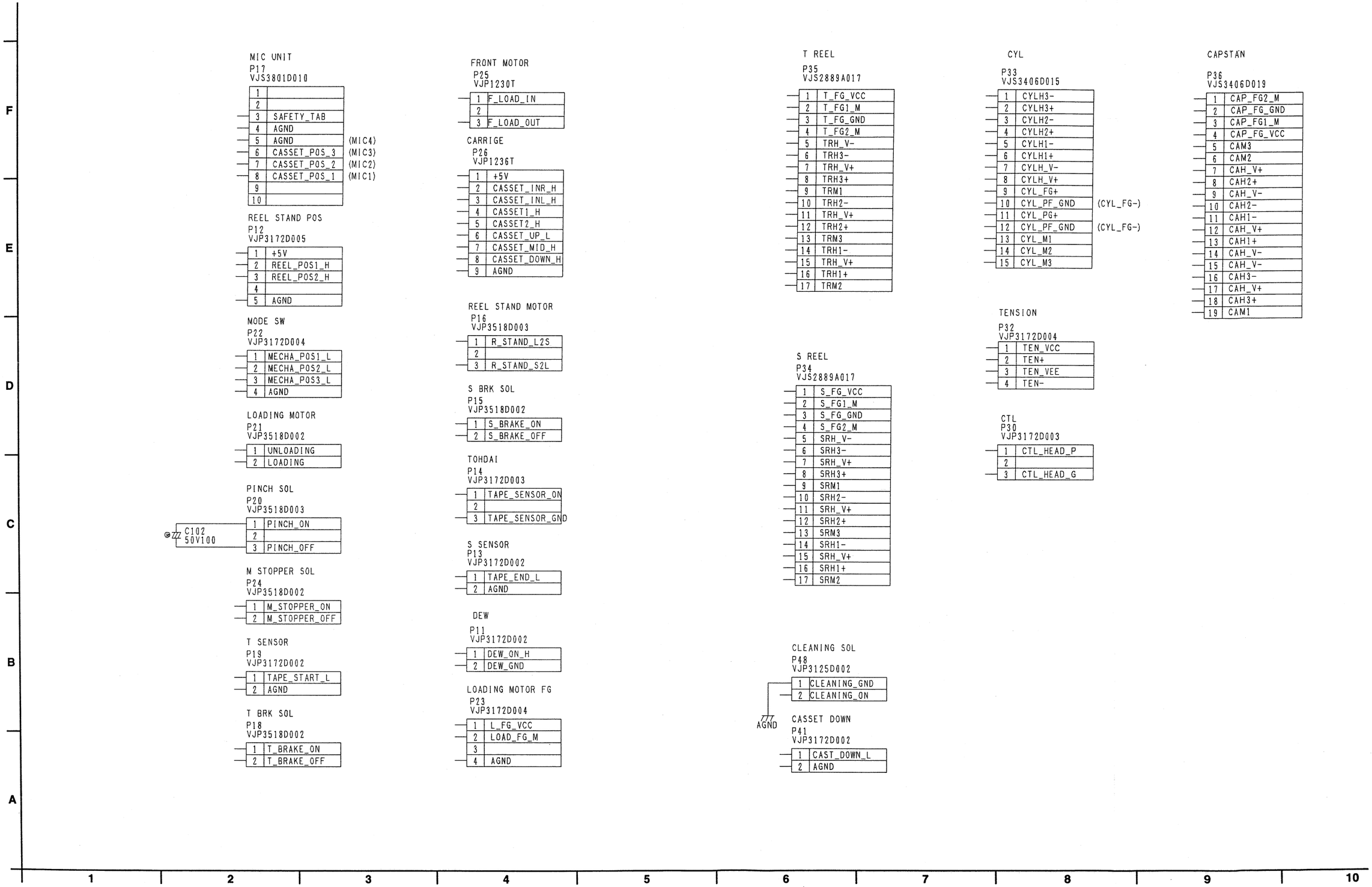
TO MOTHER

P2
VJP3418A080

A	NO	B
CTL_REC_CURR	1	CTL_PRE
CYL_PF_GND	2	CTL_GND
S_FG1_M	3	S_FG2_M
S_FG_VCC	4	S_FG_GND
T_FG1_M	5	T_FG2_M
T_FG_VCC	6	T_FG_GND
CYL_PG+	7	CYL_FG+
CAP_FG1_M	8	CAP_FG2_M
CAP_FG_VCC	9	CAP_FG_GND
CAH3+	10	CAH3-
CAH2+	11	CAH2-
CAH1+	12	CAH1-
CAH_V+	13	CAH_V-
SRH3+	14	SRH3-
SRH2+	15	SRH2-
SRH1+	16	SRH1-
SRH_V+	17	SRH_V-
TRH3+	18	TRH3-
TRH2+	19	TRH2-
TRH1+	20	TRH1-
TRH_V+	21	TRH_V-
CYLH3+	22	CYLH3-
CYLH2+	23	CYLH2-
CYLH1+	24	CYLH1-
CYLH_V+	25	CYLH_V-
TENSION	26	TENS_GND
LOADING	27	UNLOADING
TAPE_START_L	28	TAPE_END_L
F_LOAD_IN	29	F_LOAD_OUT
TAPE_SENSOR_ON	30	REEL_POS1_H
REEL_POS2_H	31	CAST_DOWN_L
SAFETY_TAB	32	MECHA_POS3_L
MECHA_POS2_L	33	MECHA_POS1_L
CASSET_DOWN_H	34	CASSET_UP_L
CASSET2_H	35	DEW_GND
CASSET1_H	36	DEW_ON_H
CASSET_INR_H	37	CASSET_INL_H
CASSET_MID_H	38	TAPE_SENSOR_GND
CASSET_POS_2	39	CASSET_POS_3
CLE_ON_H	40	CASSET_POS_1

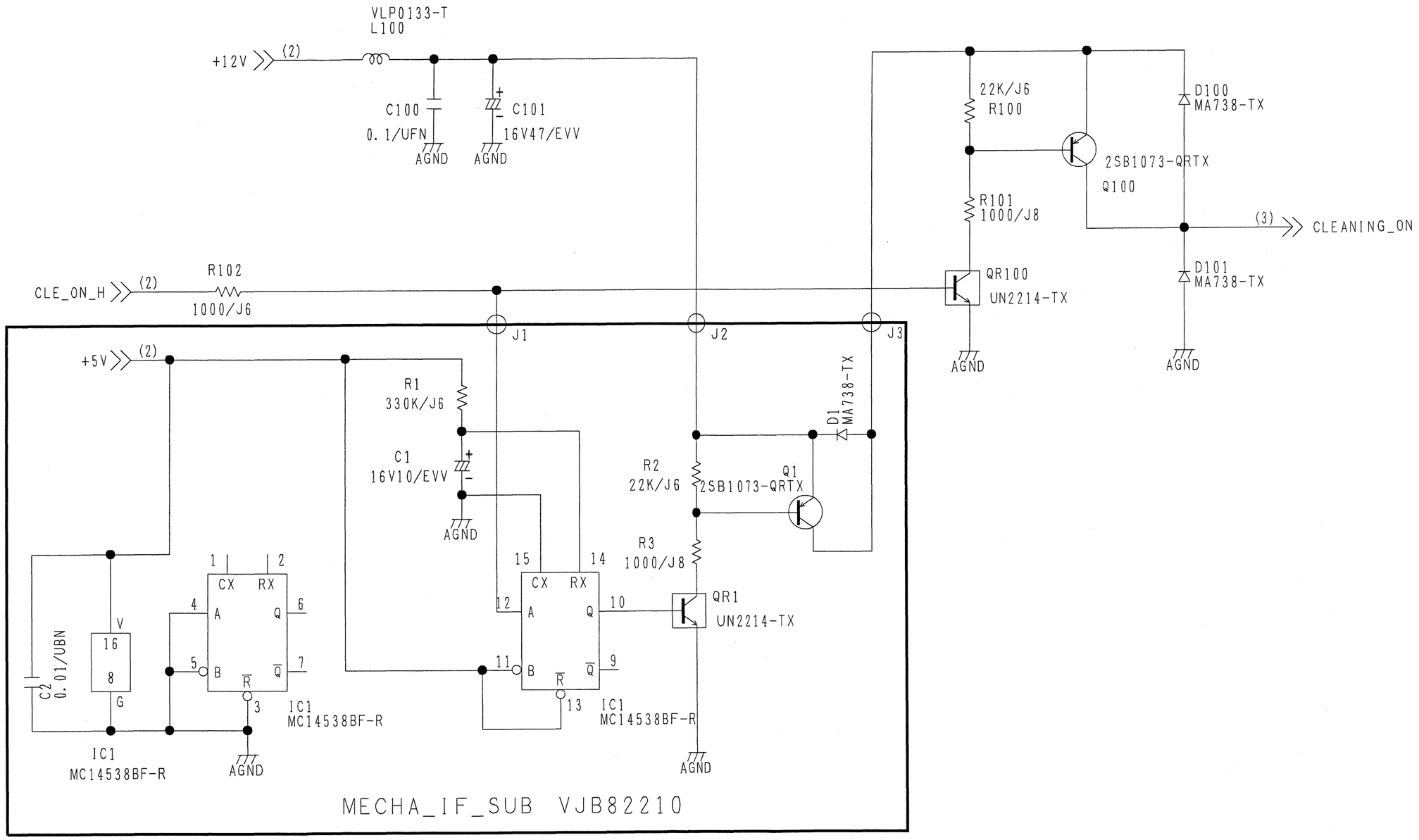
{CHECK_LINE_2}

MECHA IF 3/4 SCHEMATIC DIAGRAM



2—151

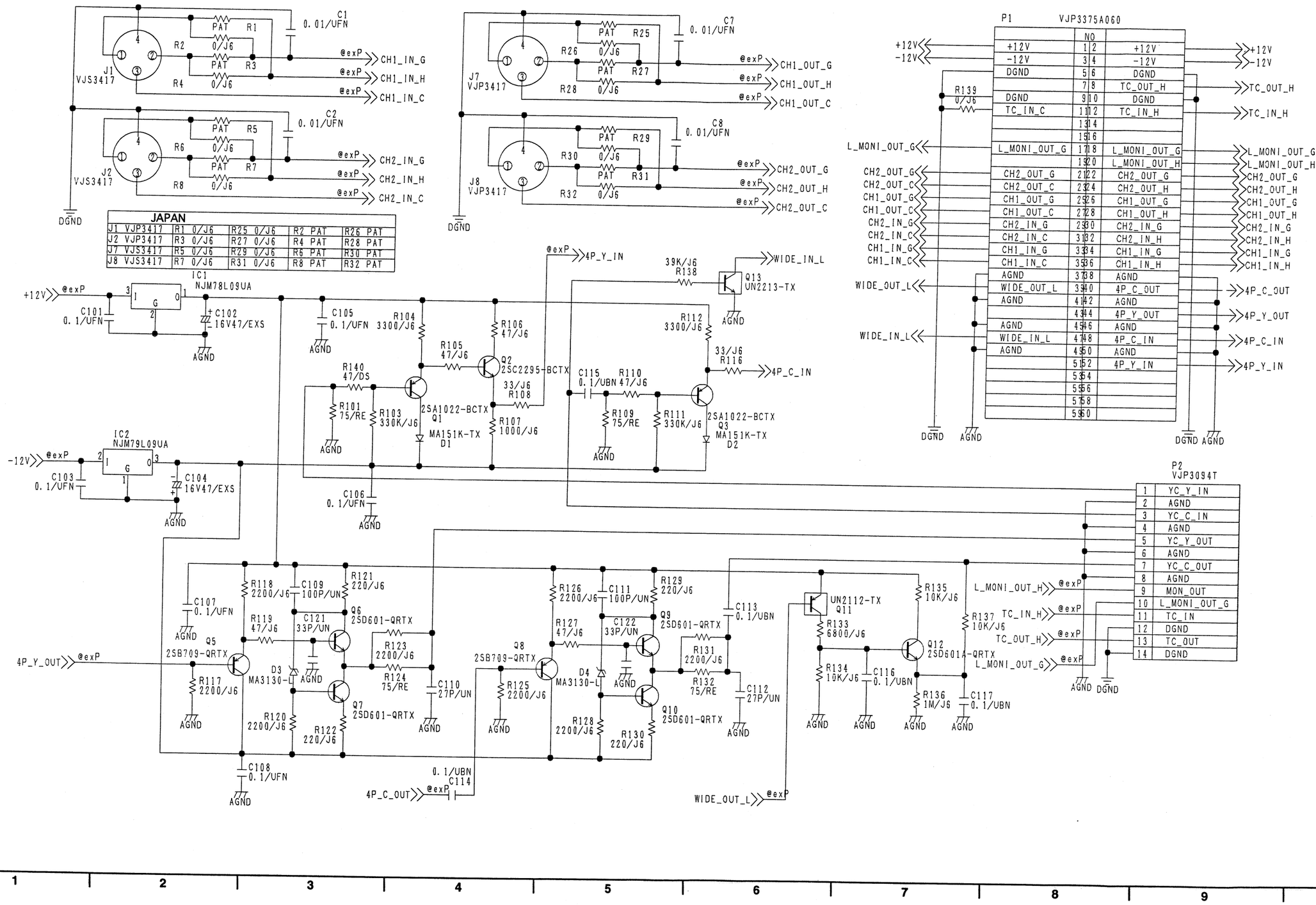
MECHA IF 4/4 SCHEMATIC DIAGRAM



REVERSE SIDE
MECHA IF 3/4

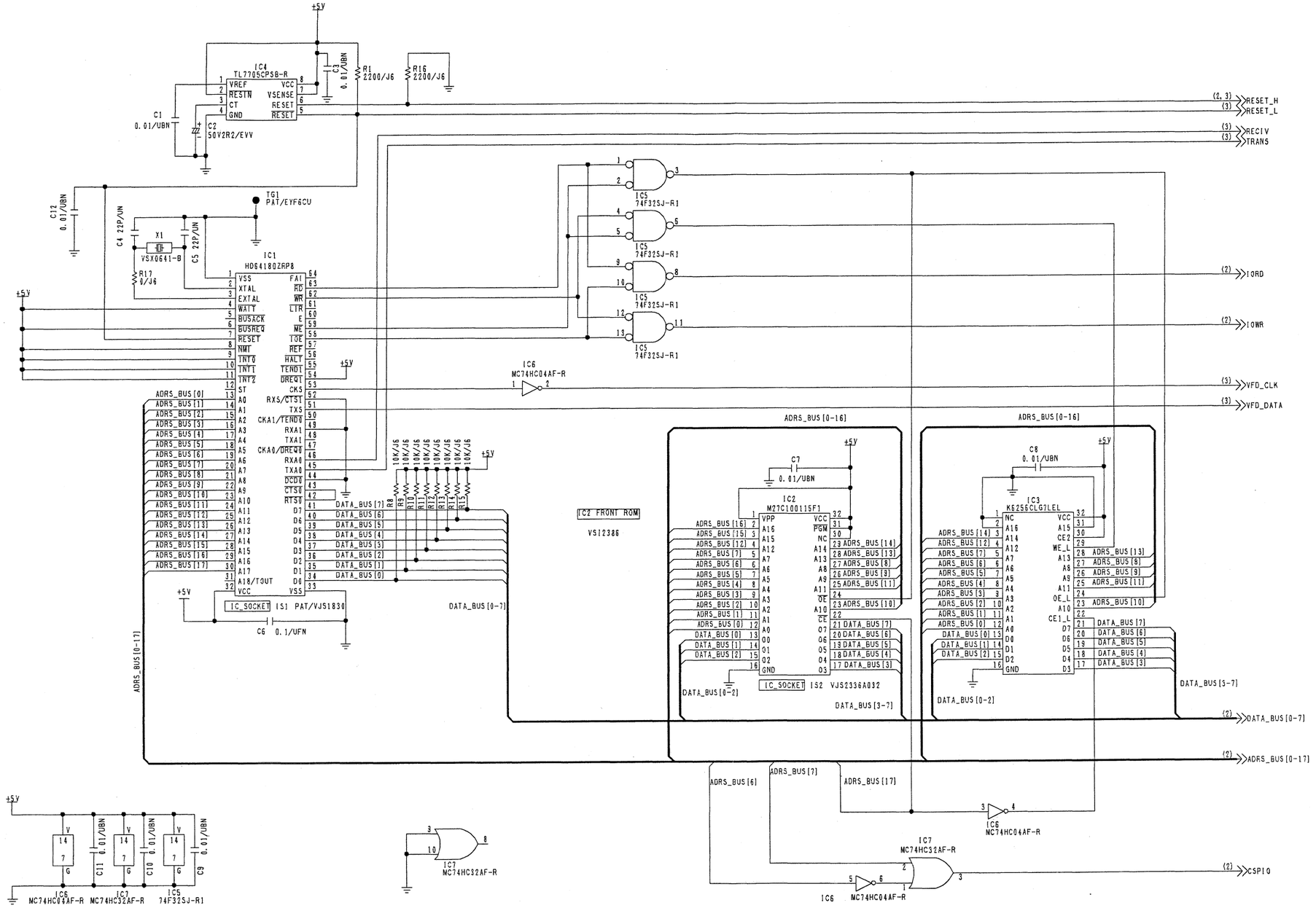
2—152

A JACK SCHEMATIC DIAGRAM

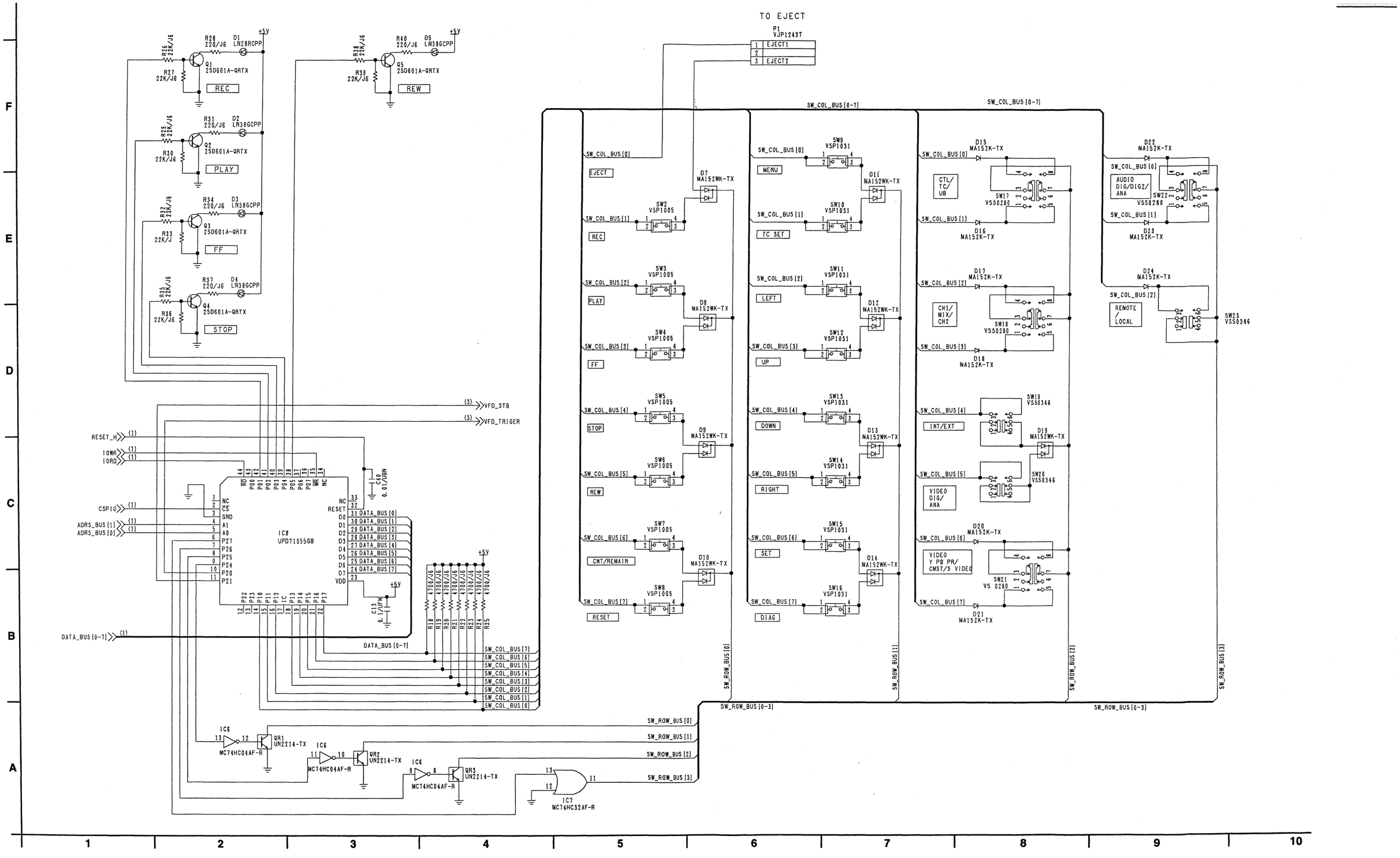


2—153

FRONT 1/3 (CPU) SCHEMATIC DIAGRAM

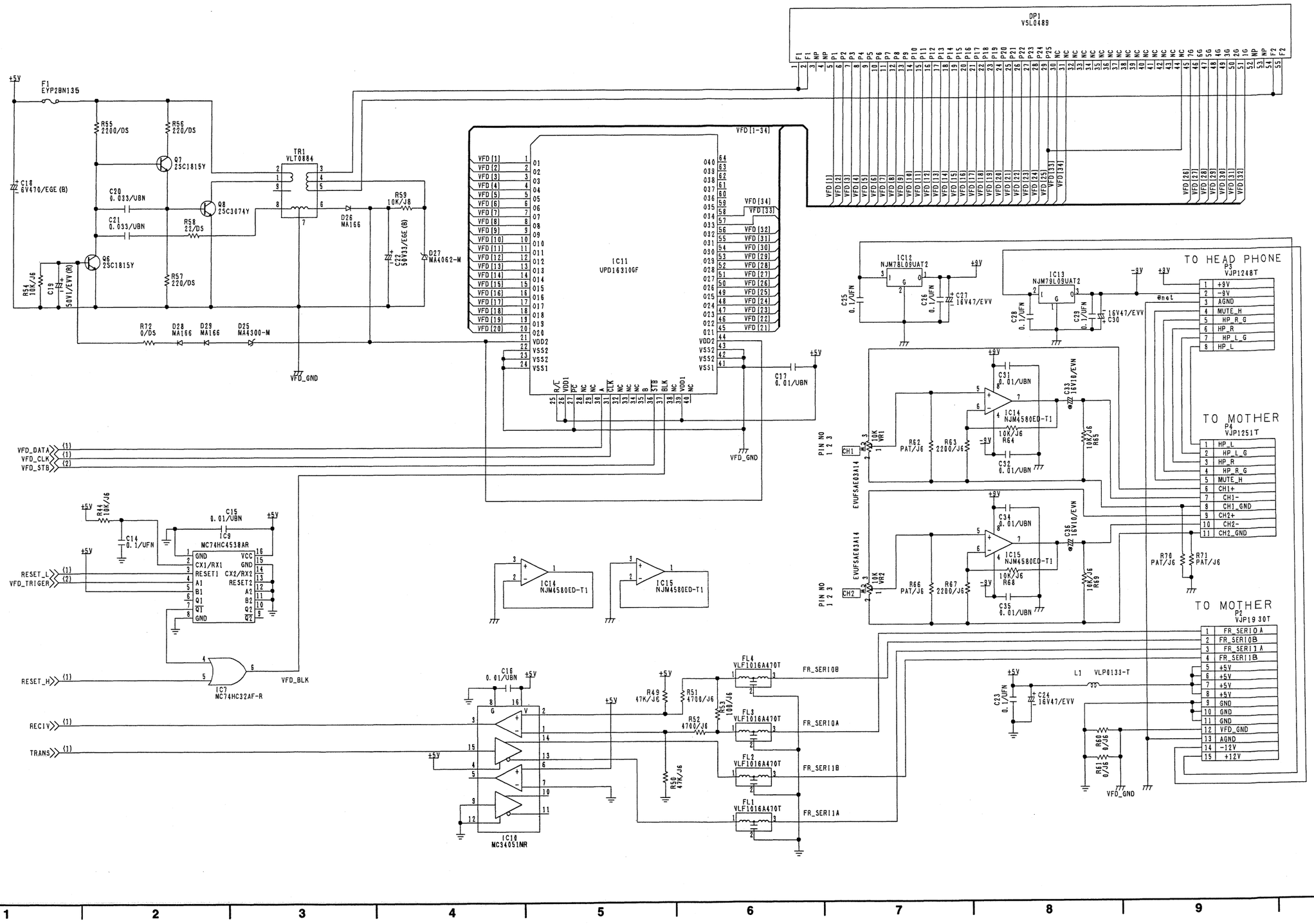


FRONT 2/3 (LED, SW) SCHEMATIC DIAGRAM

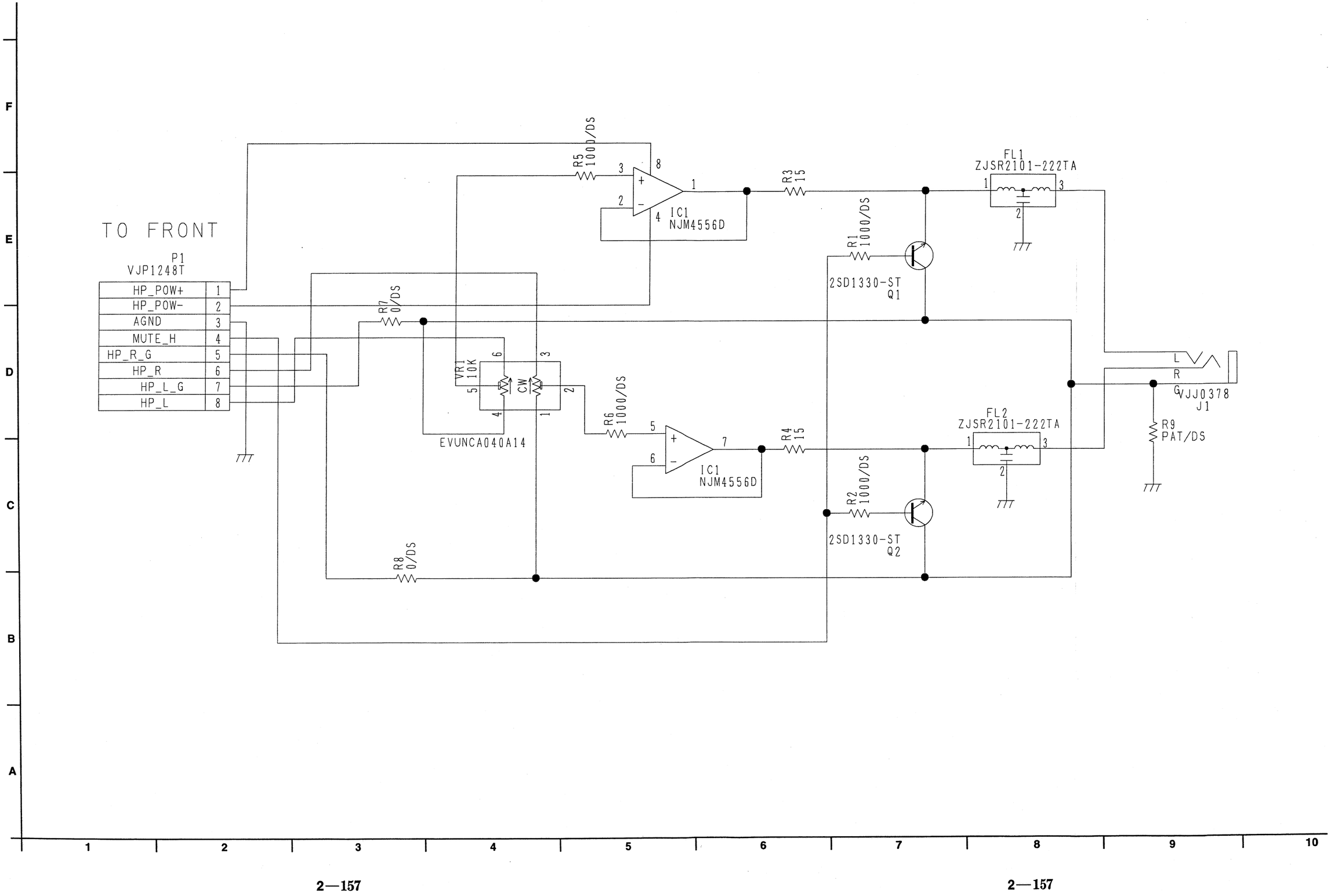


2—155

FRONT 3/3 (VFD, VR) SCHEMATIC DIAGRAM

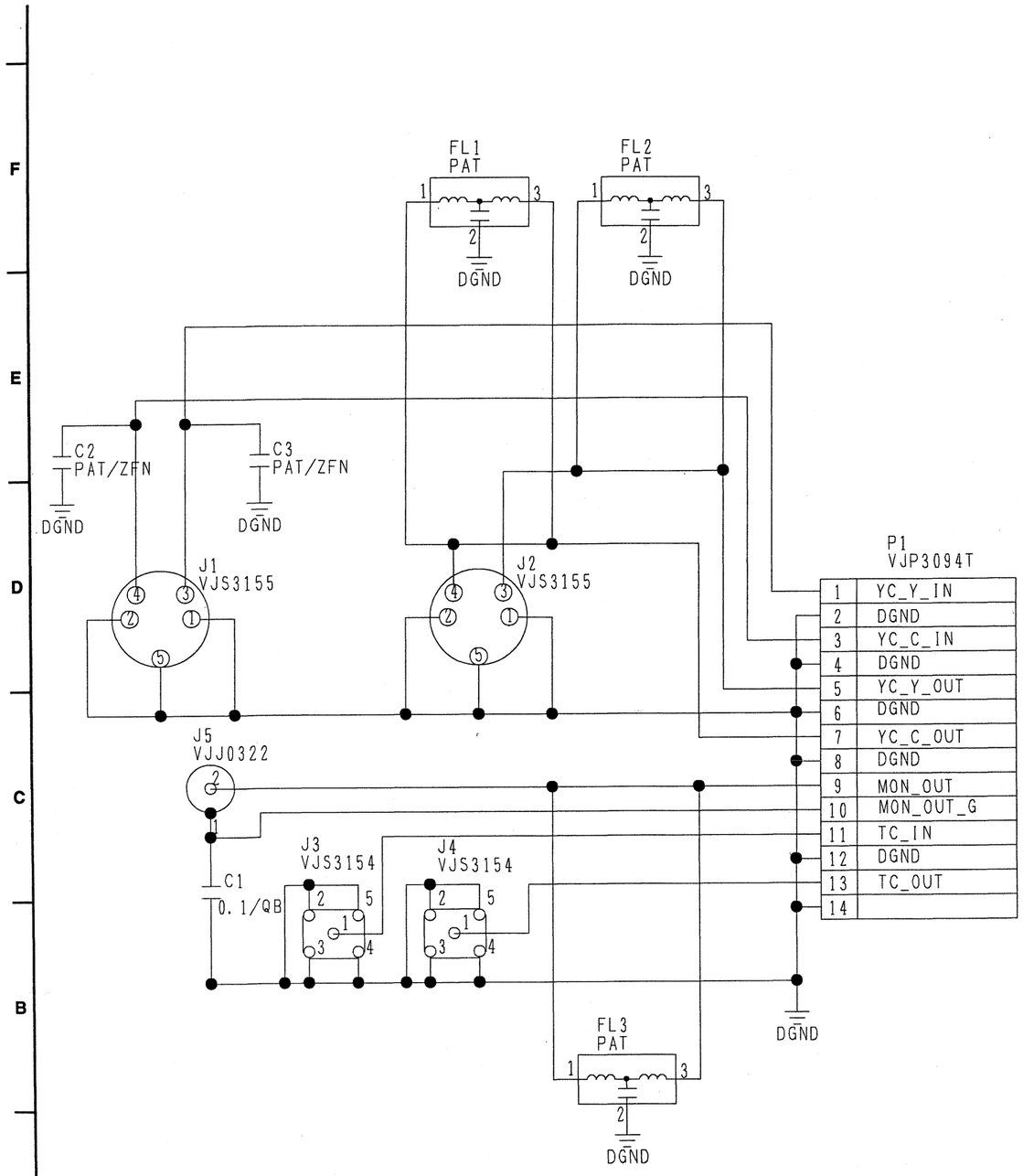


HEADPHONE SCHEMATIC DIAGRAM

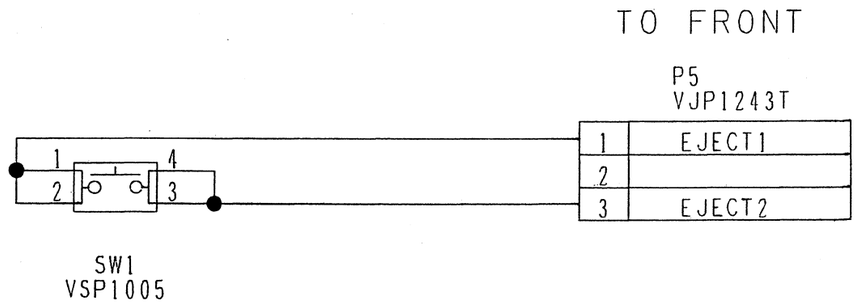


2—157

SUB JACK SCHEMATIC DIAGRAM



EJECT SCHEMATIC DIAGRAM



REVERSE SIDE
HEADPHONE

2—158

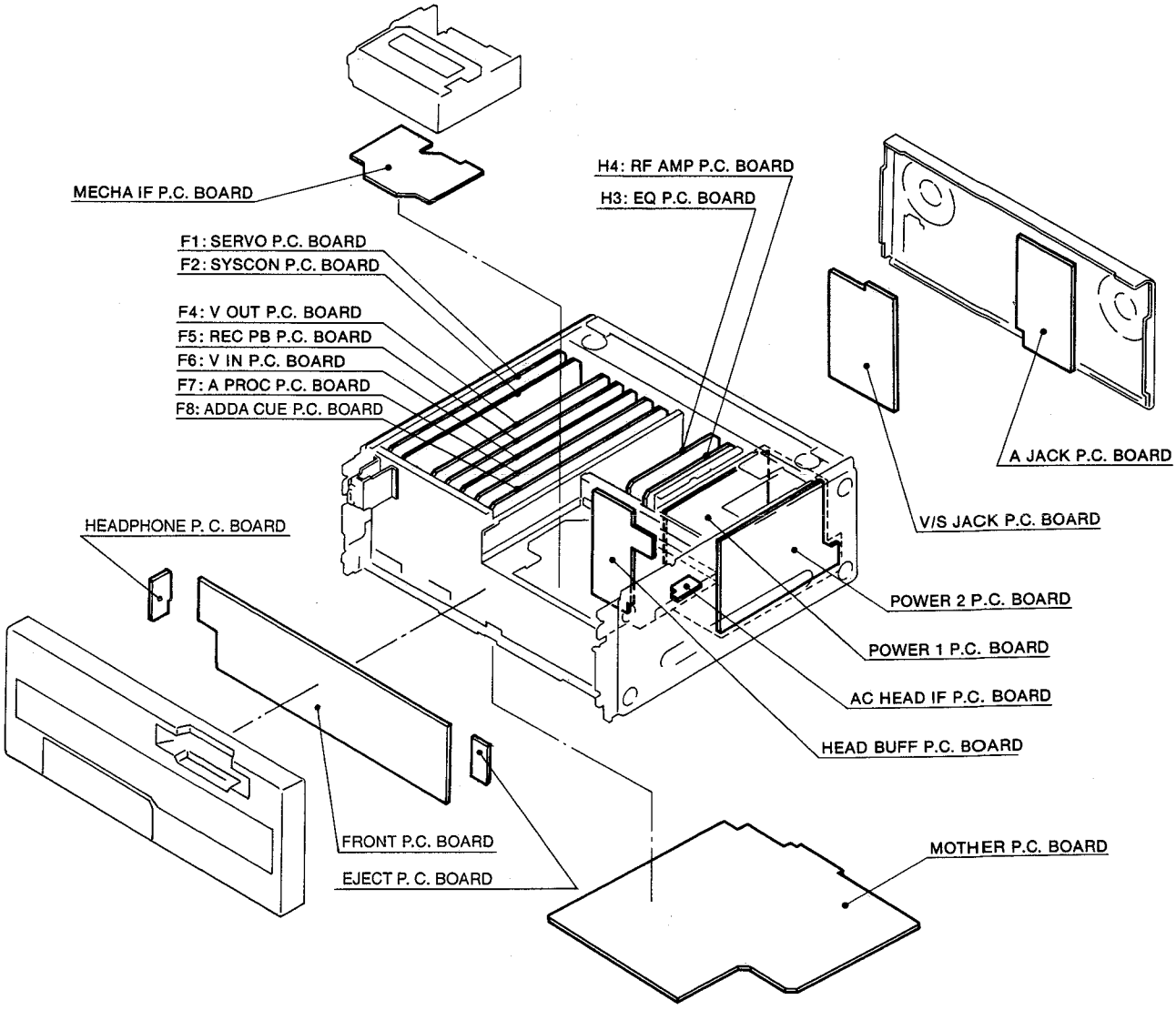
SECTION 3

CIRCUIT BOARDS

CONTENTS

CIRCUIT BOARD LOCATION 3-1
F1 SERVO P.C. BOARD 3-3
F2 SYSCON P.C. BOARD 3-4
F4 V OUT P.C. BOARD 3-5
F5 REC PB P.C. BOARD 3-6
F6 V IN P.C. BOARD 3-7
F7 A PROC P.C. BOARD 3-8
F8 ADDA CUE P.C. BOARD 3-9
H3 EQ P.C. BOARD 3-10
H4 RF AMP P.C. BOARD 3-11
FRONT P.C. BOARD 3-12
EJECT P.C. BOARD 3-12
HEAD BUFFER P.C. BOARD 3-13
POWER 1 P.C. BOARD 3-14
POWER 2 P.C. BOARD 3-15
MECA IF P.C. BOARD 3-16
A JACK P.C. BOARD 3-17
V/S JACK P.C. BOARD 3-17
MOTHER P.C. BOARD 3-18

CIRCUIT BOARD LOCATION



F1 SERVO

Transistors

Q1	E-4	Ⓒ
Q2	E-4	Ⓒ
Q3	E-4	Ⓒ
Q4	E-4	Ⓒ
Q5	E-4	Ⓒ
Q6	D-4	Ⓒ
Q340	C-1	
Q341	C-1	
Q380	B-1	
Q381	C-1	
Q400	A-1	
Q401	A-1	
Q402	B-1	
Q403	B-1	
Q500	C-4	Ⓕ
Q501	C-4	Ⓒ
Q510	C-4	Ⓒ
Q511	C-4	Ⓒ

Transistor-Resistors

QR1	E-4	Ⓕ
QR2	E-4	Ⓕ
QR3	E-4	Ⓒ
QR4	D-4	Ⓒ
QR5	D-4	Ⓕ
QR6	D-4	Ⓕ
QR7	D-4	Ⓕ
QR8	D-4	Ⓕ
QR30	E-3	Ⓒ
QR81	E-3	Ⓕ
QR82	D-3	Ⓕ
QR83	D-3	Ⓕ
QR84	D-3	Ⓕ
QR85	E-3	Ⓕ
QR120	C-3	Ⓕ
QR121	C-3	Ⓕ
QR122	C-3	Ⓕ
QR123	C-3	Ⓕ
QR124	C-3	Ⓕ
QR160	C-3	Ⓕ
QR161	C-3	Ⓕ
QR162	D-3	Ⓕ
QR163	D-3	Ⓕ
QR164	D-3	Ⓕ
QR340	A-2	Ⓒ
QR341	A-2	Ⓒ
QR400	B-2	Ⓕ
QR401	B-3	Ⓕ
QR600	B-5	Ⓕ
QR601	C-5	Ⓕ

Integrated Circuits

IC1	E-4	Ⓒ
IC2	D-4	Ⓕ
IC3	E-4	Ⓕ
IC30	E-3	Ⓕ
IC31	E-3	Ⓕ
IC32	E-4	Ⓒ
IC33	E-3	Ⓕ
IC34	E-2	Ⓕ
IC35	E-3	Ⓒ
IC60	E-2	Ⓕ
IC61	D-1	Ⓕ
IC63	E-2	Ⓒ
IC64	E-1	Ⓒ
IC65	E-1	Ⓒ
IC66	E-2	Ⓒ
IC67	D-1	Ⓕ
IC68	D-1	Ⓒ
IC69	D-2	Ⓕ
IC70	E-1	Ⓕ
IC71	E-1	Ⓕ
IC72	D-2	Ⓒ
IC73	D-1	Ⓒ
IC74	D-2	Ⓕ
IC80	E-3	Ⓕ
IC81	D-3	Ⓕ
IC82	D-2	Ⓕ
IC83	D-2	Ⓕ
IC120	C-3	Ⓕ
IC121	C-3	Ⓕ
IC160	C-2	Ⓕ
IC161	C-3	Ⓕ
IC162	D-3	Ⓕ
IC200	G-4	Ⓕ
IC201	G-4	Ⓒ
IC202	G-4	Ⓕ
IC203	F-4	Ⓒ
IC204	G-2	Ⓒ
IC205	G-4	Ⓕ
IC207	G-4	Ⓕ
IC230	I-1	Ⓒ
IC231	I-3	Ⓒ
IC235	I-1	
IC236	I-3	Ⓕ
IC237	H-2	Ⓕ
IC238	I-2	Ⓒ
IC239	I-2	Ⓒ
IC240	H-2	Ⓒ
IC241	F-3	Ⓕ
IC260	H-3	Ⓒ
IC261	J-3	Ⓒ
IC262	I-3	Ⓒ
IC263	I-3	Ⓕ
IC264	J-4	Ⓕ
IC265	F-3	Ⓒ
IC266	G-3	Ⓕ
IC267	G-3	Ⓒ
IC268	G-3	Ⓕ
IC269	F-3	Ⓕ
IC280	F-1	Ⓒ
IC281	F-1	Ⓒ
IC282	G-2	Ⓒ
IC300	H-2	Ⓒ
IC301	G-3	Ⓕ
IC302	G-2	Ⓕ
IC303	H-3	Ⓕ
IC304	G-2	Ⓕ
IC305	G-2	Ⓒ
IC320	H-4	Ⓒ
IC321	H-4	Ⓕ
IC322	H-3	Ⓒ
IC323	H-4	Ⓒ
IC324	H-3	Ⓒ
IC325	H-3	Ⓕ
IC326	H-3	Ⓕ
IC340	B-2	Ⓕ
IC341	A-2	Ⓕ
IC342	A-2	Ⓕ
IC400	A-4	Ⓒ
IC401	B-5	Ⓒ
IC402	C-4	Ⓕ
IC403	D-4	Ⓕ
IC404	C-4	Ⓕ
IC450	B-3	
IC451	A-4	
IC452	B-3	Ⓕ
IC500	C-3	Ⓕ
IC510	I-4	Ⓕ
IC511	I-4	Ⓕ
IC512	I-4	Ⓕ
IC513	I-4	Ⓕ
IC514	I-4	Ⓕ
IC515	I-4	Ⓕ
IC516	I-4	Ⓕ
IC517	I-4	Ⓕ
IC600	C-2	Ⓒ

Test Points

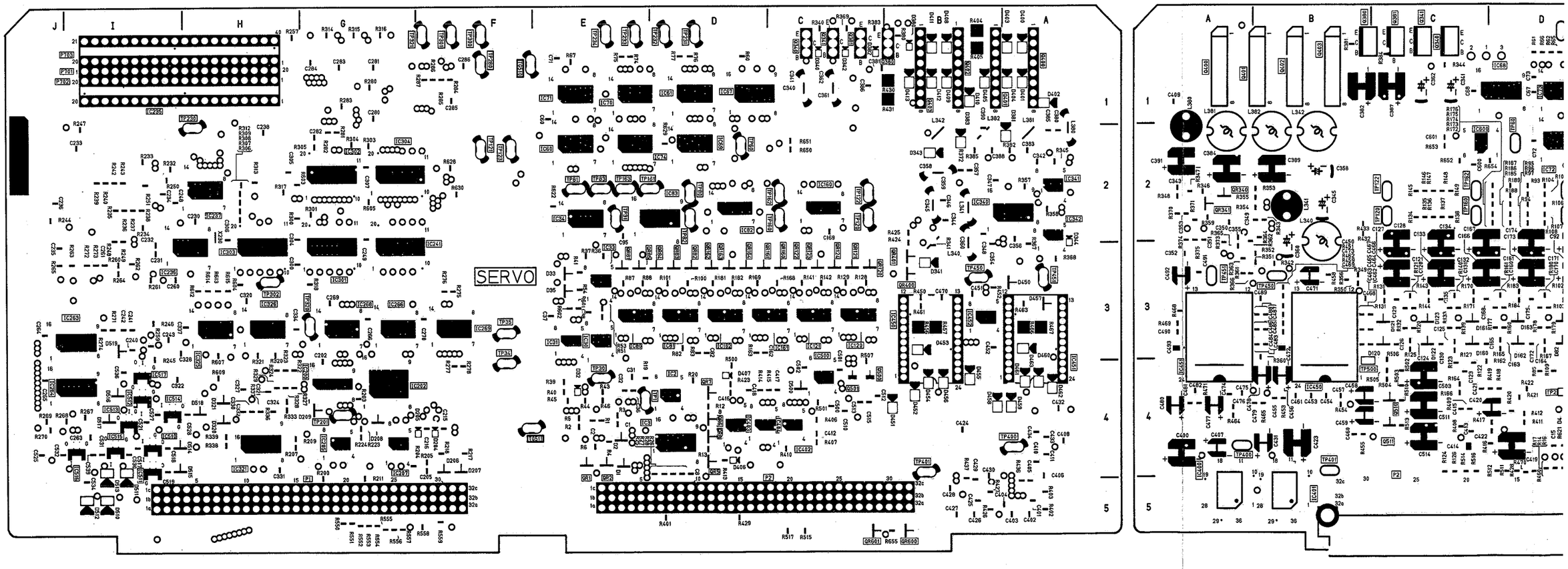
TP1	E-4	
TP2	D-4	Ⓒ
TP30	E-4	
TP31	E-2	
TP32	E-3	Ⓒ
TP33	E-3	Ⓒ
TP34	F-3	
TP35	F-3	
TP60	D-2	
TP80	D-2	
TP81	E-2	
TP82	D-2	
TP83	E-2	
TP120	C-2	
TP121	F-2	
TP122	C-2	
TP123	F-2	
TP160	C-2	
TP161	D-2	
TP162	C-2	
TP163	E-2	
TP200	G-4	Ⓒ
TP201	G-4	
TP202	G-4	Ⓒ
TP230	H-1	
TP231	D-1	
TP232	D-1	
TP233	E-1	
TP234	E-1	
TP280	F-1	
TP300	F-1	
TP301	F-1	
TP302	H-3	
TP320	G-3	
TP321	F-1	
TP400	A-4	
TP401	B-4	
TP450	B-3	
TP451	A-3	
TP500	B-4	Ⓒ
TG510	F-1	
TG511	F-4	

Connectors

P1	G-5	
P2	C-5	

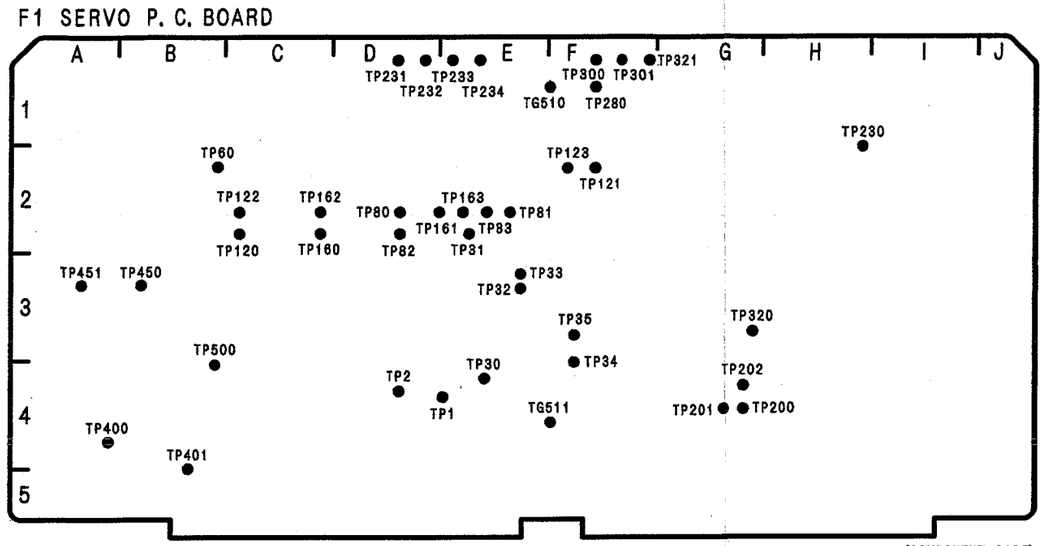
ADDRESS INFORMATION
Ⓒ... COMPONENT SIDE
Ⓕ... FOIL SIDE

F1 SERVO P.C. BOARD (VEP82105A: AJ-D650/D640/D650P/D640P / VEP82105B: AJ-D650E/D640E)

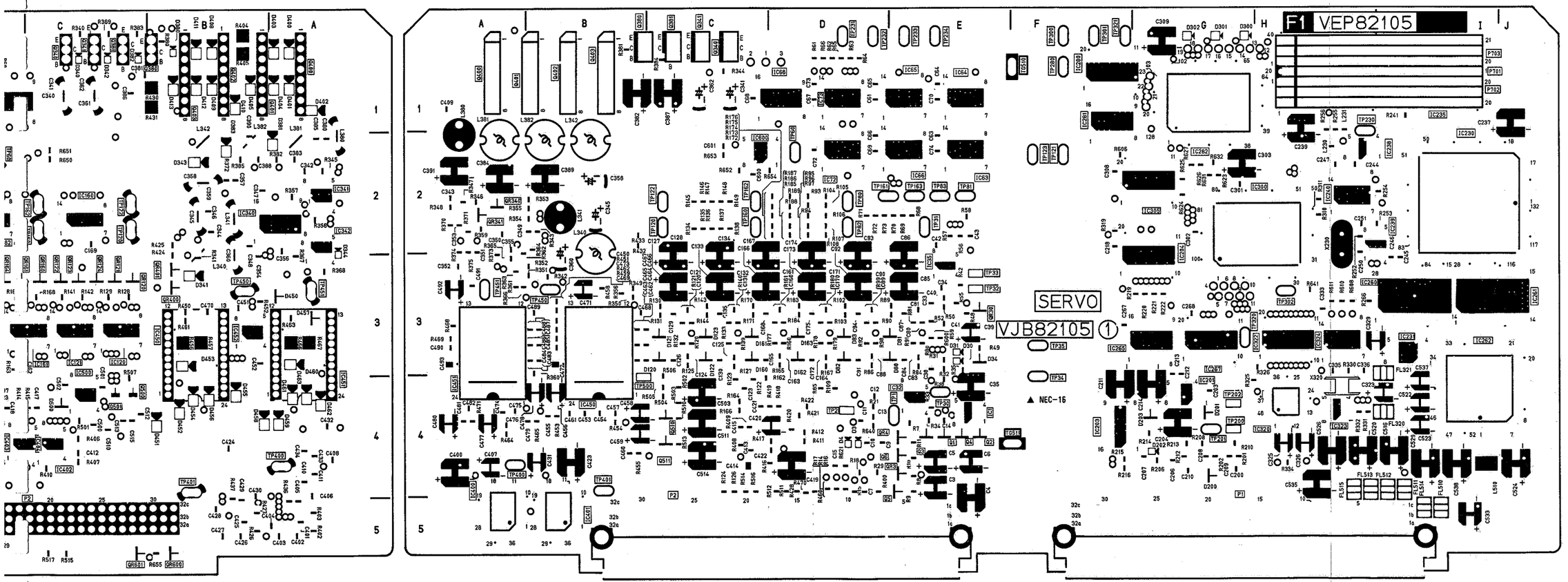


P82105B: AJ-D650E/D640E)

F1 SERVO P. C. BOARD



(COMPONENT SIDE)



F2 SYSCON P.C. BOARD (VEP86146C: AJ-D650/D650P / VEP86146D: AJ-D640/D640P / VEP86146E: AJ-D650E / VEP86146F: AJ-D640E)

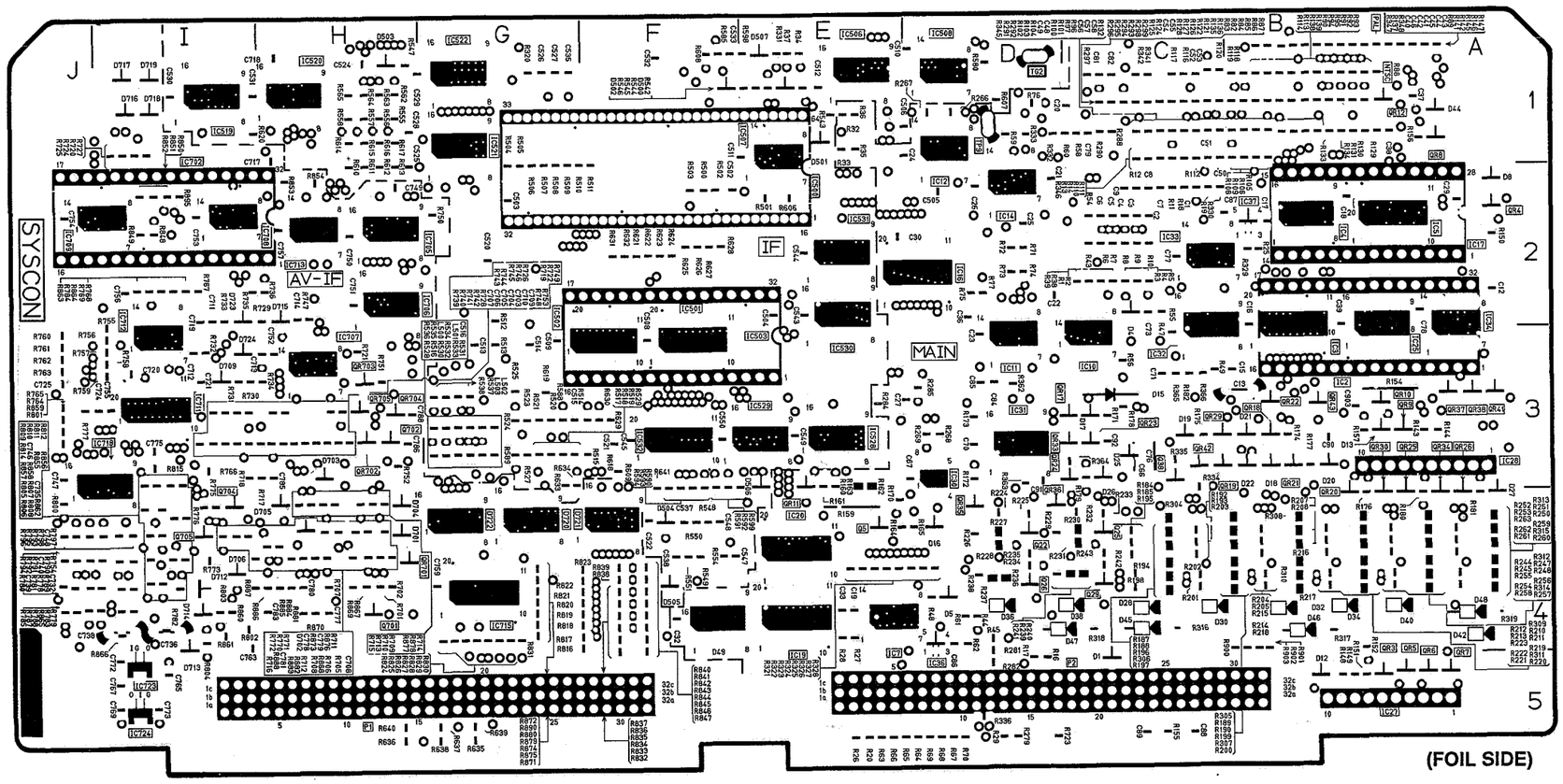
F2 SYSCON

Transistors

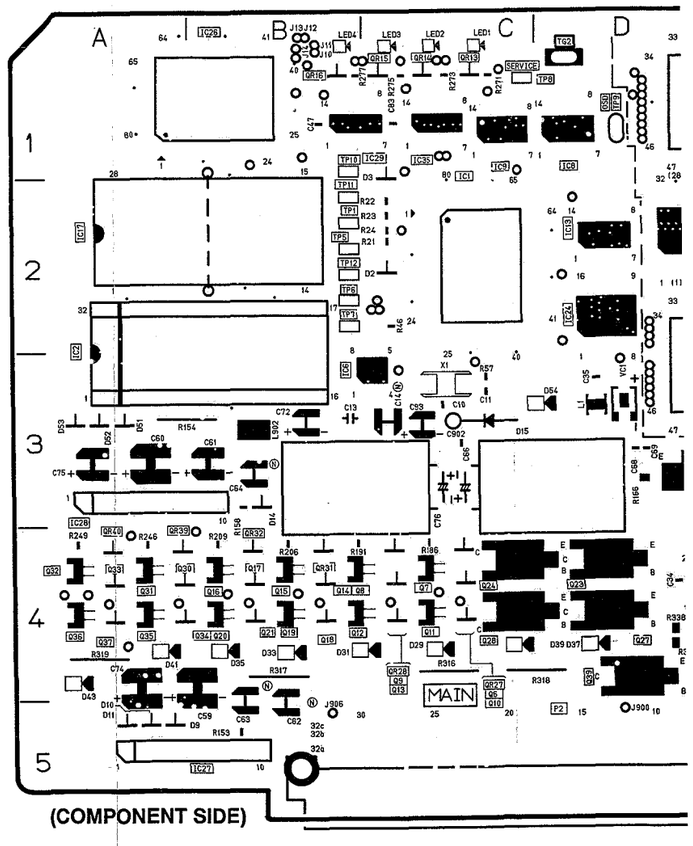
Q3	E-3	Ⓒ	Q26	D-4	Ⓕ	QR7	A-4	Ⓕ	QR32	B-4	Ⓒ	IC7	E-4	Ⓕ	IC35	C-1	Ⓒ	IC531	E-2	Ⓕ	IC724	I-5	Ⓕ
Q4	D-3	ⓒⒻ	Q27	D-4	Ⓒ	QR8	A-1	Ⓕ	QR33	D-3	Ⓕ	IC8	D-1	Ⓒ	IC36	D-4	Ⓕ	IC532	F-3	Ⓕ	IC725	H-4	Ⓒ
Q5	E-4	Ⓕ	Q28	C-4	Ⓒ	QR9	A-3	Ⓕ	QR34	A-3	Ⓕ	IC9	C-1	Ⓒ	IC37	B-2	Ⓕ	IC701	H-3	Ⓒ	IC726	H-4	Ⓒ
Q6	C-4	Ⓒ	Q29	C-4	Ⓕ	QR10	A-3	Ⓕ	QR35	D-4	Ⓕ	IC10	C-2	Ⓕ	IC500	F-2		IC702	I-2		**Test Points**		
Q7	C-4	ⓒⒻ	Q30	A-4	Ⓒ	QR11	E-4	Ⓕ	QR36	D-3	Ⓕ	IC11	D-3	Ⓕ	IC501	F-2	Ⓕ	IC703	I-1	Ⓒ			
Q8	B-4	ⓒⒻ	Q31	A-4	Ⓒ	QR12	A-1	Ⓕ	QR37	A-3	Ⓕ	IC12	D-2	Ⓕ	IC502	G-2	Ⓕ	IC704	H-2	Ⓒ	TP1	B-2	Ⓒ
Q9	C-4	ⓒⒻ	Q32	A-4	Ⓒ	QR13	C-1	Ⓒ	QR38	A-3	Ⓕ	IC13	D-2	Ⓒ	IC503	F-3		IC705	G-2	Ⓕ	TP2	E-4	Ⓒ
Q10	C-5	Ⓒ	Q33	A-4	Ⓒ	QR14	C-1	Ⓒ	QR39	A-4	Ⓒ	IC14	D-2	Ⓕ	IC504	E-2	Ⓒ	IC706	G-2	Ⓕ	TP3	E-5	Ⓒ
Q11	C-4	Ⓒ	Q34	B-4	Ⓒ	QR15	C-1	Ⓒ	QR40	A-4	Ⓒ	IC15	E-2	Ⓒ	IC505	D-1	Ⓒ	IC707	H-3	Ⓕ	TP4	E-4	Ⓒ
Q12	B-4	ⓒⒻ	Q35	A-4	Ⓒ	QR16	B-1	Ⓒ	QR41	A-3	Ⓕ	IC16	D-2	Ⓕ	IC506	E-1	Ⓕ	IC708	H-2	Ⓕ	TP5	B-2	Ⓒ
Q13	C-4	ⓒⒻ	Q36	A-4	Ⓒ	QR17	D-3	Ⓕ	QR42	C-3	Ⓕ	IC17	A-2		IC507	E-1	Ⓕ	IC709	J-2	Ⓕ	TP6	B-2	Ⓒ
Q14	B-4	ⓒⒻ	Q37	A-4	Ⓒ	QR18	B-3	Ⓕ	QR43	B-3	Ⓕ	IC19	E-4	Ⓕ	IC508	D-1	Ⓕ	IC710	I-2	Ⓒ	TP7	B-2	Ⓒ
Q15	B-4	ⓒⒻ	Q38	C-3	Ⓕ	QR19	C-3	Ⓕ	QR701	G-4	Ⓕ	IC20	E-4	Ⓕ	IC509	G-2	Ⓒ	IC711	I-2	Ⓕ	TP8	C-1	Ⓒ
Q16	B-4	ⓒⒻ	Q39	D-5	Ⓒ	QR20	B-4	Ⓕ	QR702	H-3	Ⓕ	IC23	E-4	Ⓒ	IC510	G-3	Ⓒ	IC712	I-3	Ⓕ	TP9	D-1	
Q17	B-4	ⓒⒻ	Q701	H-4	Ⓕ	QR21	B-3	Ⓕ	QR703	H-3	Ⓕ	IC24	D-2	Ⓒ	IC514	G-3	Ⓒ	IC713	H-2	Ⓕ	TP10	B-1	Ⓒ
Q18	B-4	ⓒⒻ	Q702	H-3	Ⓕ	QR22	B-3	Ⓕ	QR704	H-3	Ⓕ	IC25	A-3	Ⓒ	IC515	G-4	Ⓒ	IC714	G-4	Ⓒ	TP11	B-2	Ⓒ
Q19	B-4	ⓒⒻ	Q703	H-3	Ⓒ	QR23	C-3	Ⓕ	QR705	H-3	Ⓕ	IC26	B-1	Ⓒ	IC516	G-4	Ⓒ	IC715	G-4	Ⓕ	TP12	B-2	Ⓒ
Q20	B-4	ⓒⒻ	Q704	H-3	Ⓕ	QR24	D-3	Ⓕ	**Integrated Circuits**			IC27	B-5		IC517	F-1	Ⓒ	IC716	F-4	Ⓒ	TP500	F-2	Ⓒ
Q21	B-4	ⓒⒻ	Q705	H-4	Ⓕ	QR25	A-3	Ⓒ				IC28	A-3		IC523	F-1	Ⓒ	IC717	G-4	Ⓒ	TP501	F-2	Ⓒ
Q22	D-4	Ⓕ	**Transistor-Resistors**			QR26	A-3	Ⓕ	IC1	C-1	Ⓒ	IC29	C-1	Ⓒ	IC524	E-1	Ⓒ	IC718	I-3	Ⓕ	TP502	G-2	Ⓒ
Q23	D-4	ⓒⒻ				QR27	C-4	Ⓒ	IC2	A-2		IC30	D-3	Ⓕ	IC525	G-1	Ⓒ	IC719	J-4	Ⓒ	TP503	G-2	Ⓒ
Q24	C-4	ⓒⒻ	QR3	A-4	Ⓕ	QR28	C-4	Ⓒ	IC3	B-3	Ⓕ	IC31	D-3	Ⓕ	IC527	F-3	Ⓒ	IC720	J-4	Ⓒ	TP504	F-2	Ⓒ
Q25	C-4	Ⓕ	QR4	A-2	Ⓕ	QR29	C-3	Ⓕ	IC4	B-2	Ⓕ	IC32	C-3	Ⓕ	IC528	E-3	Ⓕ	IC721	I-3	Ⓒ	TP505	F-1	Ⓒ
			QR5	A-4	Ⓕ	QR30	B-3	Ⓒ	IC5	A-2	Ⓕ	IC33	C-2	Ⓕ	IC529	E-3	Ⓕ	IC722	I-3	Ⓒ	TP506	F-1	Ⓒ
			QR6	A-4	Ⓕ	QR31	B-4	Ⓒ	IC6	B-3	Ⓒ	IC34	A-2	Ⓒ	IC530	E-3	Ⓕ	IC723	I-5	Ⓕ	TP701	J-5	Ⓒ

TP702	J-5	Ⓒ	
TG1	F-1	Ⓒ	
TG2	D-1		
TG701	H-4	Ⓒ	
Adjustment			
VC1	D-3	Ⓒ	
Switch			
SW501	G-1		
Connectors			
P1	G-5		
P2	D-5		

ADDRESS INFORMATION
Ⓒ ... COMPONENT SIDE
Ⓕ ... FOIL SIDE



(FOIL SIDE)



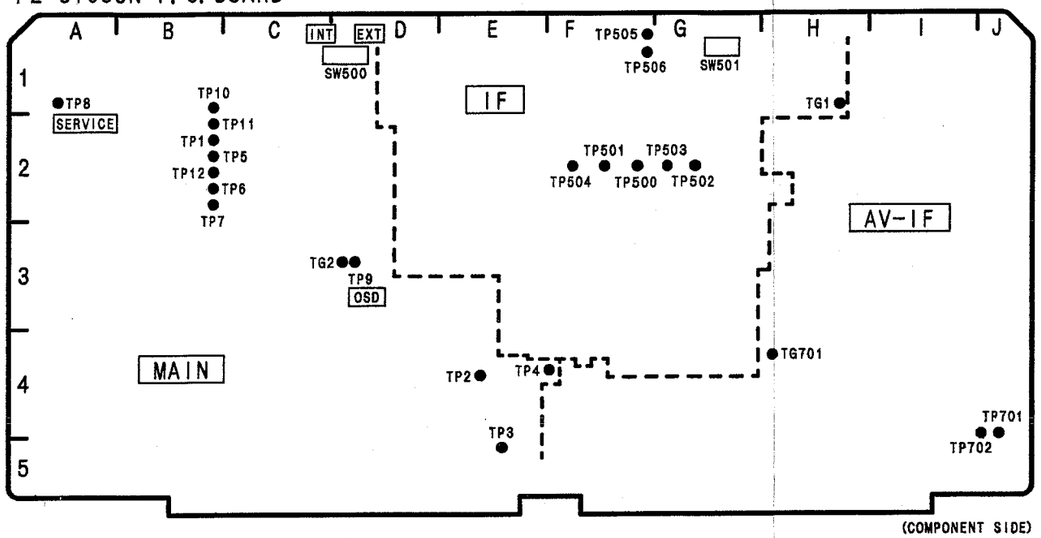
(COMPONENT SIDE)

D640/D640P / VEP86146E: AJ-D650E / VEP86146F: AJ-D640E)

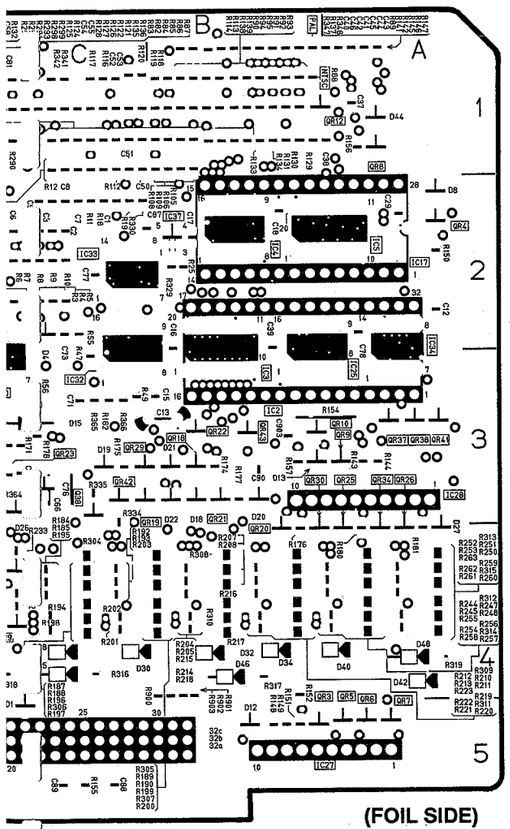
SCON

-4	Ⓕ	IC35	C-1	Ⓒ	IC531	E-2	Ⓕ	IC724	I-5	Ⓕ	TP702	J-5	Ⓒ
-1	Ⓒ	IC36	D-4	Ⓕ	IC532	F-3	Ⓕ	IC725	H-4	Ⓒ	TG1	F-1	Ⓒ
-1	Ⓒ	IC37	B-2	Ⓕ	IC701	H-3	Ⓒ	IC726	H-4	Ⓒ	TG2	D-1	
-2	Ⓕ	IC500	F-2		IC702	I-2		**Test Points**			TG701	H-4	Ⓒ
D-3	Ⓕ	IC501	F-2	Ⓕ	IC703	I-1	Ⓒ				**Adjustment**		
-2	Ⓕ	IC502	G-2	Ⓕ	IC704	H-2	Ⓒ	TP1	B-2	Ⓒ	VC1	D-3	Ⓒ
-2	Ⓒ	IC503	F-3		IC705	G-2	Ⓕ	TP2	E-4	Ⓒ	**Switch**		
-2	Ⓕ	IC504	E-2	Ⓒ	IC706	G-2	Ⓕ	TP3	E-5	Ⓒ	SW501	G-1	
-2	Ⓒ	IC505	D-1	Ⓒ	IC707	H-3	Ⓕ	TP4	E-4	Ⓒ	**Connectors**		
D-2	Ⓕ	IC506	E-1	Ⓕ	IC708	H-2	Ⓕ	TP5	B-2	Ⓒ	P1	G-5	
A-2		IC507	E-1	Ⓕ	IC709	J-2	Ⓕ	TP6	B-2	Ⓒ	P2	D-5	
-4	Ⓕ	IC508	D-1	Ⓕ	IC710	I-2	Ⓒ	TP7	B-2	Ⓒ			
-4	Ⓕ	IC509	G-2	Ⓒ	IC711	I-2	Ⓕ	TP8	C-1	Ⓒ			
-4	Ⓒ	IC510	G-3	Ⓒ	IC712	I-3	Ⓕ	TP9	D-1				
D-2	Ⓒ	IC514	G-3	Ⓒ	IC713	H-2	Ⓕ	TP10	B-1	Ⓒ			
A-3	Ⓒ	IC515	G-4	Ⓒ	IC714	G-4	Ⓒ	TP11	B-2	Ⓒ			
-1	Ⓒ	IC516	G-4	Ⓒ	IC715	G-4	Ⓕ	TP12	B-2	Ⓒ			
-5		IC517	F-1	Ⓒ	IC716	F-4	Ⓒ	TP500	F-2	Ⓒ			
-3		IC523	F-1	Ⓒ	IC717	G-4	Ⓒ	TP501	F-2	Ⓒ			
C-1	Ⓒ	IC524	E-1	Ⓒ	IC718	I-3	Ⓕ	TP502	G-2	Ⓒ			
D-3	Ⓕ	IC525	G-1	Ⓒ	IC719	J-4	Ⓒ	TP503	G-2	Ⓒ			
-3	Ⓕ	IC527	F-3	Ⓒ	IC720	J-4	Ⓒ	TP504	F-2	Ⓒ			
-3	Ⓕ	IC528	E-3	Ⓕ	IC721	I-3	Ⓒ	TP505	F-1	Ⓒ			
-2	Ⓕ	IC529	E-3	Ⓕ	IC722	I-3	Ⓒ	TP506	F-1	Ⓒ			
A-2	Ⓒ	IC530	E-3	Ⓕ	IC723	I-5	Ⓕ	TP701	J-5	Ⓒ			

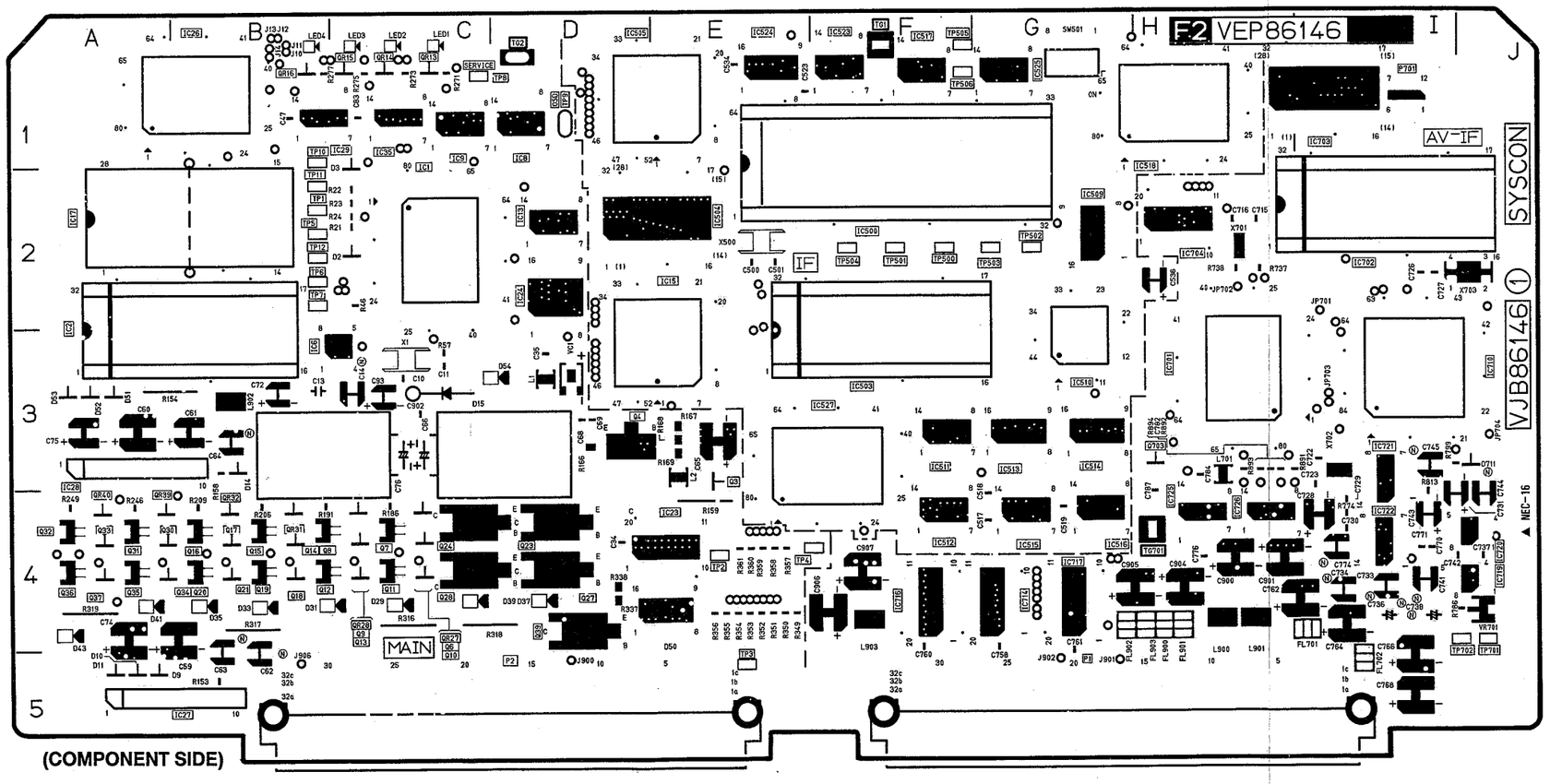
F2 SYSCON P. C. BOARD



(COMPONENT SIDE)



(FOIL SIDE)



(COMPONENT SIDE)

F4 V OUT P.C. BOARD (VEP83352A: AJ-D650/D640/D650P/D640P / VEP83352B: AJ-D650E/D640E)

F4 V OUT

Transistors

Q200		
Q300	F-4	Ⓕ
Q301	F-3	Ⓕ
Q302	F-3	Ⓕ
Q303	F-3	Ⓕ
Q304	F-3	Ⓕ
Q305	F-2	Ⓕ
Q306	G-2	Ⓒ
Q307	F-1	Ⓒ
Q308	F-1	Ⓕ
Q309	F-2	Ⓕ
Q310	F-1	Ⓕ
Q311	G-1	Ⓕ
Q312	F-1	Ⓕ
Q313	F-1	Ⓕ
Q314	F-2	Ⓕ
Q315	H-1	Ⓕ
Q316	H-1	Ⓕ
Q317	G-1	Ⓕ
Q318	G-2	Ⓒ
Q319	F-1	Ⓒ
Q400	E-1	Ⓒ
Q401	G-2	Ⓕ
Q402	E-1	Ⓕ
Q403	E-1	Ⓒ
Q404	G-3	Ⓕ
Q405	F-1	Ⓕ
Q406	G-2	Ⓕ
Q407	G-2	Ⓕ
Q408	F-1	Ⓒ
Q409	G-3	Ⓕ
Q410	G-3	Ⓕ
Q500	I-4	Ⓕ
Q501	I-4	Ⓕ
Q502	I-3	Ⓒ
Q503	I-3	Ⓒ
Q504	I-4	Ⓕ
Q505	I-1	Ⓕ
Q506	H-2	Ⓕ
Q507	I-1	Ⓕ
Q508	H-1	Ⓕ
Q509	H-2	Ⓕ
Q510	H-2	Ⓕ
Q511	I-3	Ⓕ
Q512	I-3	Ⓕ
Q513	H-2	Ⓕ
Q514	I-2	Ⓕ
Q800	I-2	Ⓒ
Q801	I-2	Ⓒ
Q802	J-3	Ⓒ
Q803	J-3	Ⓕ
Q804	I-3	Ⓕ
Q805	I-2	Ⓕ
Q806	I-3	Ⓕ
Q807	I-2	Ⓒ
Q850	H-4	Ⓒ
Q851	H-3	Ⓕ
Q1000	C-2	Ⓕ
Q1001	D-2	Ⓕ
Q1002	D-2	Ⓕ

Transistor-Resistors

QR200	E-3	Ⓒ

Integrated Circuits

IC150	D-4	Ⓒ
IC151	C-4	Ⓒ
IC152	D-4	Ⓒ
IC153	D-4	Ⓒ
IC154	D-4	Ⓒ
IC156	E-3	Ⓒ
IC157	D-3	Ⓕ
IC158	C-4	Ⓒ
IC159	D-3	Ⓒ
IC160	C-3	Ⓒ
IC161	E-4	Ⓒ
IC163	D-3	Ⓒ
IC200	B-4	Ⓒ
IC201	C-4	Ⓒ
IC202	E-4	Ⓒ
IC203	B-3	Ⓒ
IC250	B-4	Ⓕ
IC251	C-4	Ⓒ
IC300	G-2	Ⓕ
IC301	G-3	Ⓕ
IC303	E-2	Ⓒ
IC306	F-4	Ⓒ
IC307	F-3	Ⓒ
IC308	F-3	Ⓒ
IC309	G-1	Ⓒ
IC310	G-1	Ⓒ
IC311	F-1	Ⓒ
IC312	G-2	Ⓕ
IC313	G-4	Ⓕ
IC500	I-2	Ⓒ
IC502	I-3	Ⓒ
IC503	H-2	Ⓒ
IC600	B-5	Ⓒ
IC601	A-4	Ⓕ
IC602	A-4	Ⓕ
IC603	A-4	Ⓒ
IC700	A-4	Ⓒ
IC800	I-2	Ⓒ
IC801	J-2	Ⓒ
IC802	I-2	Ⓒ
IC804	I-2	Ⓒ
IC805	I-3	Ⓒ
IC850	H-3	Ⓒ
IC900	E-1	Ⓕ
IC902	D-2	Ⓒ
IC904	C-1	Ⓒ
IC908	D-1	Ⓒ
IC909	D-1	Ⓒ
IC910	A-1	Ⓒ
IC913	A-2	Ⓒ
IC915	D-2	Ⓒ
IC916	B-3	Ⓕ
IC923	B-3	Ⓒ
IC924	B-3	Ⓒ
IC925	B-2	Ⓒ
IC1000	C-2	Ⓖ
IC1001	D-3	Ⓒ
IC1002	C-2	Ⓒ
IC1003	C-2	Ⓕ
IC1004	C-1	Ⓒ
IC1005	D-2	Ⓒ
IC1015	D-2	Ⓒ
IC1051	B-1	Ⓒ
IC1053	A-3	Ⓒ
IC1055	A-2	Ⓒ
IC1056	A-3	Ⓒ
IC1057	A-2	Ⓒ
IC1058	A-2	Ⓕ
IC1100	C-3	Ⓒ
IC1102	D-3	Ⓒ
IC1103	C-3	Ⓒ
IC1106	B-2	Ⓒ
IC1107	B-1	Ⓕ
IC1108	B-1	Ⓒ
IC1113	B-2	Ⓕ
IC1114	B-1	Ⓕ
IC1115	B-1	Ⓒ
IC1116	B-1	Ⓒ
IC1150	E-2	Ⓕ
IC1151	E-3	Ⓕ
IC1152	E-2	Ⓒ
IC1153	G-4	
IC1154	G-4	
IC1155	G-4	
IC1156	E-3	Ⓕ
IC1157	E-3	Ⓕ
IC1158	E-2	Ⓕ
IC1159	C-3	Ⓕ
IC1160	I-4	
IC1161	I-4	Ⓕ
IC1162	I-4	Ⓕ

Test Points

TG100	E-5
TG150	E-4
TG250	C-4
TG503	H-3
TG704	A-5
TG802	H-3
TG901	E-1
TG902	D-1
TG1106	A-2
TP300	F-2
TP500	H-3
TP501	H-3
TP700	A-5
TP701	A-5
TP702	B-5
TP703	B-5
TP800	I-4
TP801	J-4
TP900	E-2
TP903	D-1
TP904	D-1
TP905	C-1
TP1000	C-2
TP1001	C-1
TP1100	B-2
TP1101	C-2
TP1102	C-2
TP1103	C-2
TP1104	B-2
TP1105	B-2

Adjustments

VC500	I-3
VC1000	C-1
VR300	F-1
VR301	G-1
VR302	G-1
VR303	F-1
VR304	G-1
VR305	G-1
VR306	F-1
VR307	G-1
VR400	F-1
VR500	H-2
VR501	H-1
VR502	I-2
VR503	H-2
VR504	H-1
VR505	H-1
VR506	H-2
VR507	I-1
VR800	I-2
VR801	I-1
VR802	I-1
VR803	J-2
VR900	C-1
VR901	D-1
VR902	B-1
VR1000	C-1
VR1001	D-1
VR1050	A-1
VR1100	C-1
VR1102	B-1

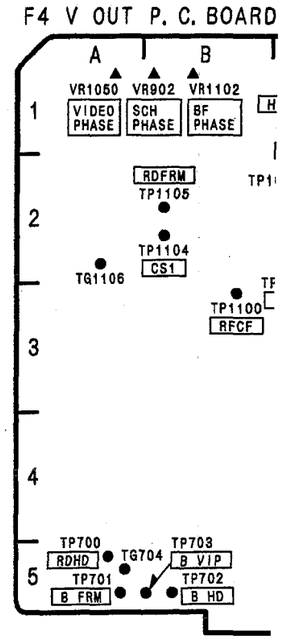
Switches

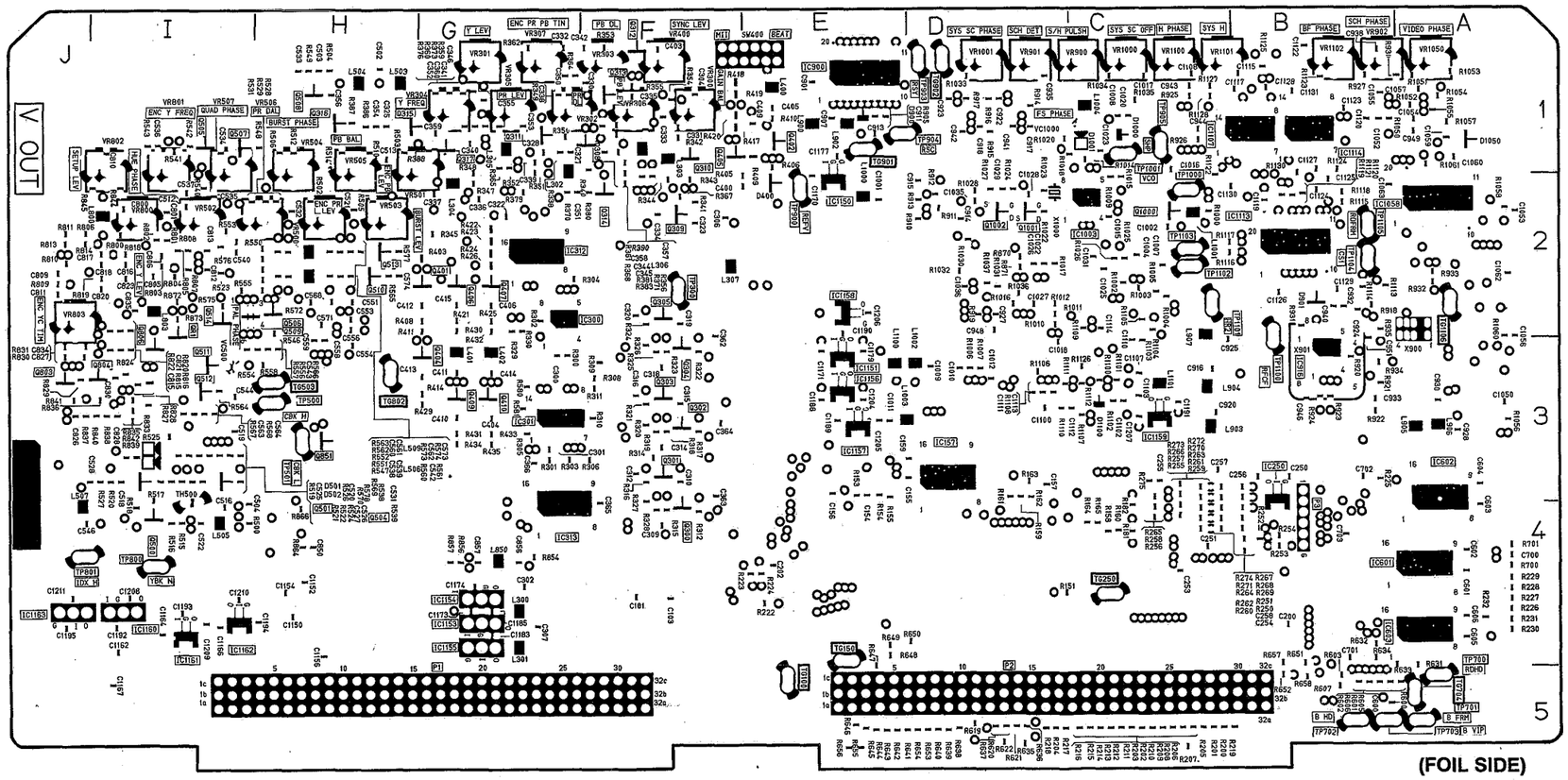
SW400	E-1

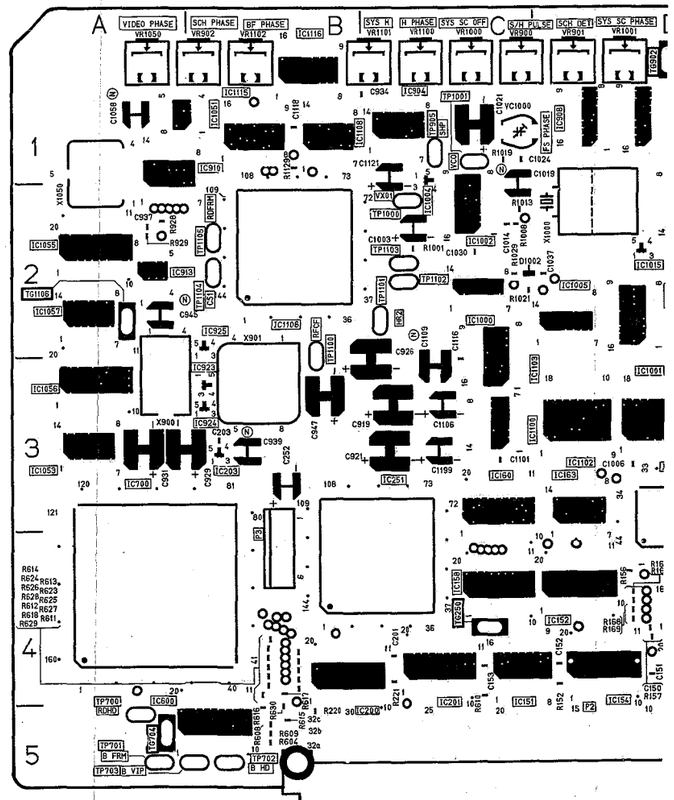
Connectors

P1	H-5
P2	D-5
P3	B-4

ADDRESS INFORMATION
Ⓒ ... COMPONENT SIDE
Ⓕ ... FOIL SIDE



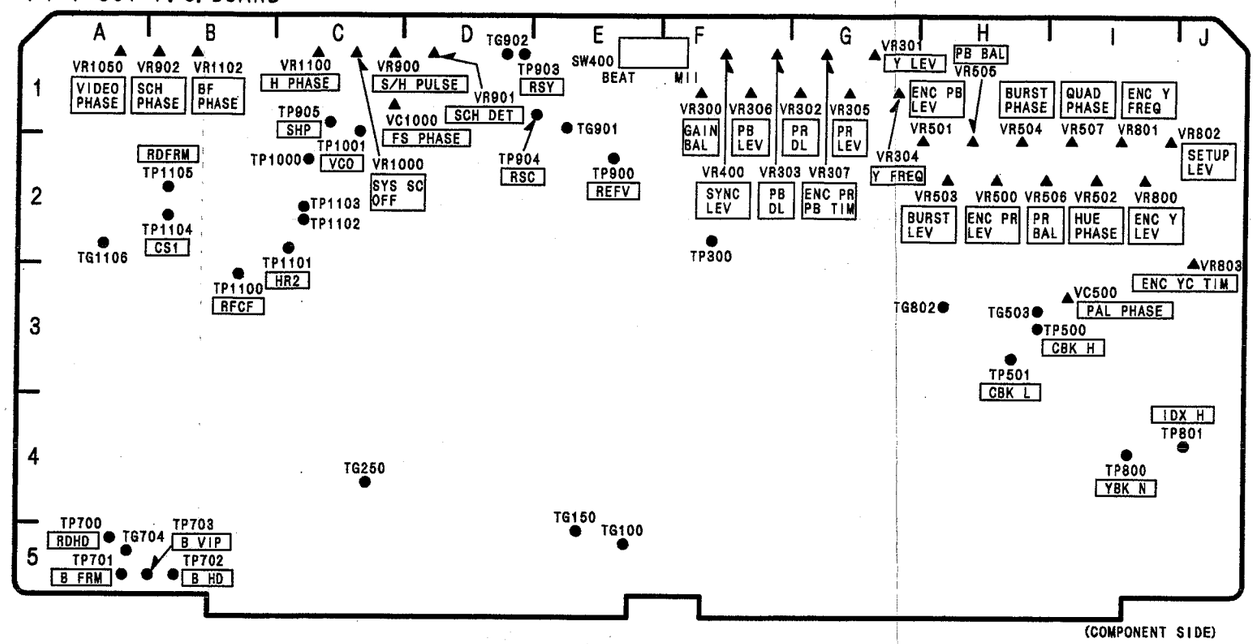




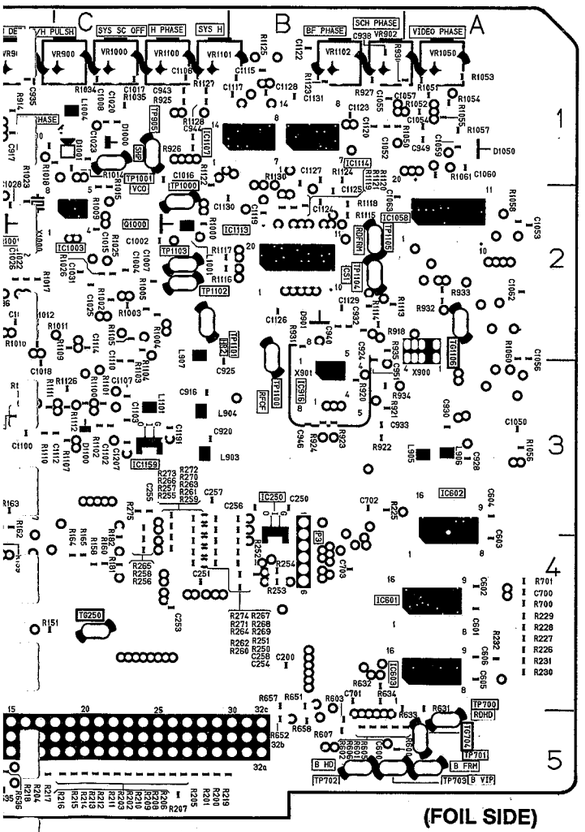
EP83352B: AJ-D650E/D640E)

C-1	©	IC1156	E-3	Ⓕ	TP800	I-4	VR307	G-1	**Connectors**	
D-2	©	IC1157	E-3	Ⓕ	TP801	J-4	VR400	F-1	P1	H-5
D-2	©	IC1158	E-2	Ⓕ	TP900	E-2	VR500	H-2	P2	D-5
B-1	©	IC1159	C-3	Ⓕ	TP903	D-1	VR501	H-1	P3	B-4
A-3	©	IC1160	I-4		TP904	D-1	VR502	I-2		
A-2	©	IC1161	I-4	Ⓕ	TP905	C-1	VR503	H-2		
A-3	©	IC1162	I-4	Ⓕ	TP1000	C-2	VR504	H-1		
A-2	©				TP1001	C-1	VR505	H-1		
A-2	Ⓕ	**Test Points**			TP1100	B-2	VR506	H-2		
C-3	©	TG100	E-5		TP1101	C-2	VR507	I-1		
D-3	©	TG150	E-4		TP1102	C-2	VR800	I-2		
C-3	©	TG250	C-4		TP1103	C-2	VR801	I-1		
B-2	©	TG503	H-3		TP1104	B-2	VR802	I-1		
B-1	Ⓕ	TG704	A-5		TP1105	B-2	VR803	J-2		
B-1	©	TG802	H-3				VR900	C-1		
B-2	Ⓕ	TG901	E-1		**Adjustments**		VR901	D-1		
B-1	Ⓕ	TG902	D-1		VC500	I-3	VR902	B-1		
B-1	©	TG1106	A-2		VC1000	C-1	VR1000	C-1		
B-1	©	TP300	F-2		VR300	F-1	VR1001	D-1		
E-2	Ⓕ	TP500	H-3		VR301	G-1	VR1050	A-1		
E-3	Ⓕ	TP501	H-3		VR302	G-1	VR1100	C-1		
E-2	©	TP700	A-5		VR303	F-1	VR1102	B-1		
G-4		TP701	A-5		VR304	G-1				
G-4		TP702	B-5		VR305	G-1	**Switches**			
G-4		TP703	B-5		VR306	F-1	SW400	E-1		

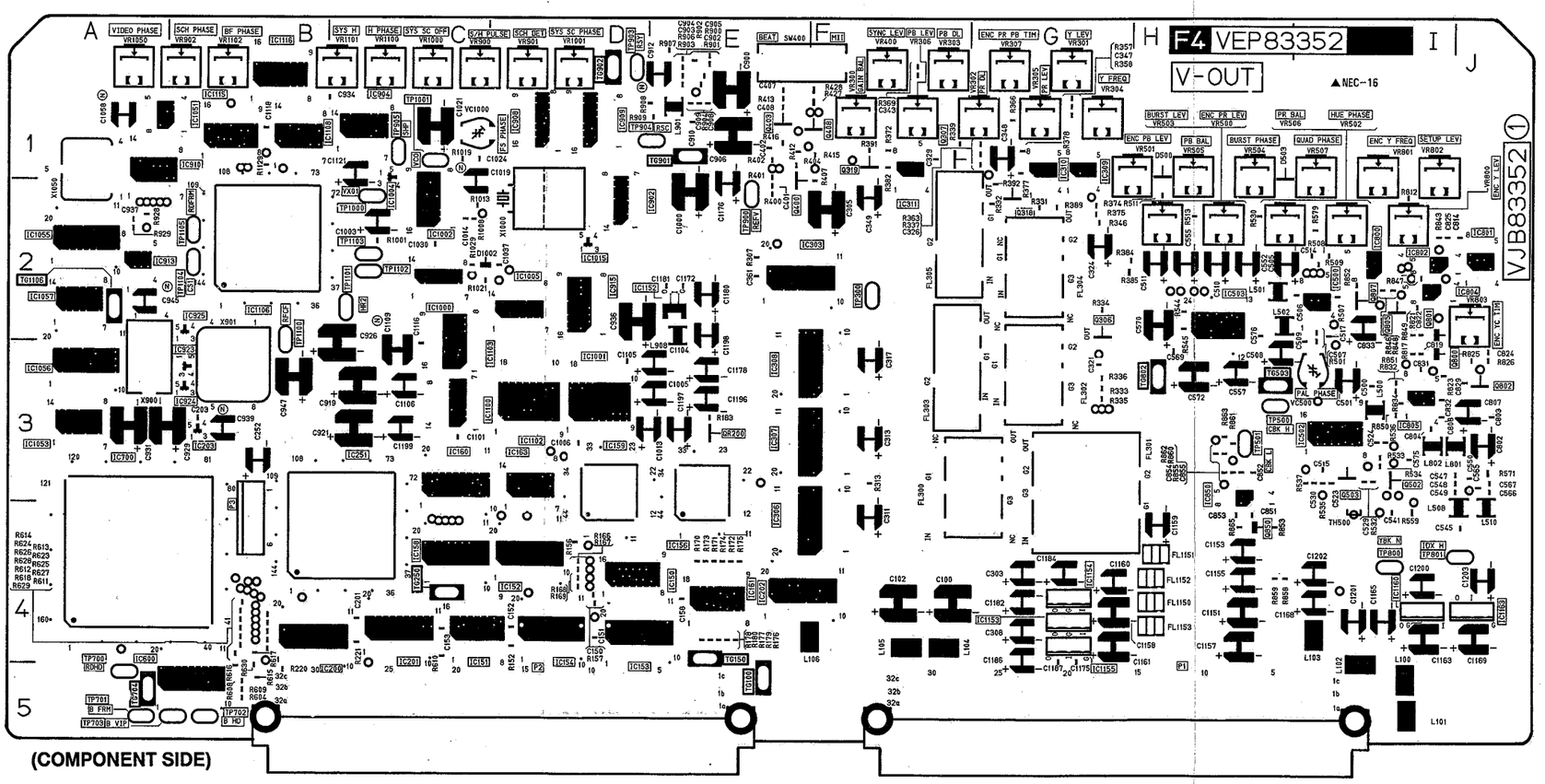
F4 V OUT P. C. BOARD



(COMPONENT SIDE)



(FOIL SIDE)



(COMPONENT SIDE)

F5 REC PB P.C. BOARD (VEP83353A: AJ-D650/D640/D650P/D640P / VEP83353B: AJ-D650E/D640E)

F5 REC PB

Transistors		
Q3001	E-3	Ⓕ
Q3501	H-1	Ⓕ

Transistor-Resistor		
QR3501	H-1	Ⓕ

Integrated Circuits		
IC3001	E-2	Ⓒ
IC3003	D-4	Ⓒ
IC3004	D-3	Ⓒ
IC3005	D-2	Ⓒ
IC3006	C-4	Ⓒ
IC3007	F-2	Ⓒ
IC3008	F-1	Ⓒ
IC3009	H-4	Ⓒ
IC3010	I-4	Ⓒ
IC3011	G-2	Ⓒ
IC3012	G-1	Ⓒ
IC3013	B-2	Ⓒ
IC3014	C-2	Ⓒ
IC3015	D-1	Ⓒ
IC3016	A-3	Ⓒ
IC3017	A-2	Ⓒ
IC3018	A-2	Ⓕ
IC3019	B-2	Ⓕ
IC3020	A-2	Ⓕ
IC3021	B-2	Ⓕ
IC3022	H-3	Ⓒ
IC3023	I-3	Ⓕ
IC3024	C-3	Ⓒ
IC3025	G-4	Ⓒ
IC3027	F-1	Ⓕ
IC3028	G-1	Ⓕ
IC3030	G-3	Ⓒ
IC3031	B-4	Ⓒ
IC3035	A-4	Ⓒ
IC3036	B-4	Ⓒ
IC3037	A-4	Ⓒ
IC3101	C-3	Ⓕ
IC3102	E-2	Ⓕ
IC3103	D-3	Ⓕ
IC3104	D-3	Ⓕ
IC3105	D-3	Ⓕ
IC3107	E-4	Ⓕ
IC3108	E-4	Ⓕ
IC3109	F-4	Ⓕ
IC3110	E-3	Ⓕ
IC3111	E-3	Ⓕ
IC3112	F-3	Ⓕ
IC3113	F-3	Ⓕ
IC3114	D-4	Ⓕ
IC3115	F-2	Ⓕ
IC3116	G-3	Ⓕ
IC3117	G-2	Ⓕ
IC3118	D-4	Ⓕ
IC3119	D-4	Ⓕ
IC3120	C-4	Ⓕ
IC3121	C-3	Ⓕ
IC3122	D-4	Ⓕ
IC3123	C-3	Ⓕ
IC3124	B-3	Ⓕ
IC3125	E-1	Ⓕ
IC3126	E-1	Ⓕ
IC3127	F-2	Ⓕ
IC3128	I-4	Ⓕ
IC3129	J-4	Ⓕ
IC3130	G-1	Ⓕ
IC3131	G-2	Ⓕ
IC3132	D-2	Ⓕ
IC3133	D-2	Ⓕ
IC3134	A-4	Ⓕ
IC3135	B-4	Ⓕ
IC3136	A-4	Ⓕ
IC3137	B-4	Ⓕ
IC3138	B-4	Ⓕ
IC3139	B-3	Ⓕ
IC3140	B-3	Ⓕ
IC3141	A-3	Ⓕ
IC3142	B-3	Ⓕ
IC3143	A-3	Ⓕ
IC3144	B-3	Ⓕ
IC3145	I-4	Ⓕ
IC3146	I-4	Ⓕ
IC3147	I-4	Ⓕ
IC3148	H-2	Ⓕ
IC3149	G-4	Ⓕ
IC3150	G-4	Ⓕ
IC3151	G-4	Ⓕ
IC3152	G-3	Ⓕ
IC3153	G-4	Ⓕ
IC3154	H-3	Ⓕ
IC3156	G-3	Ⓕ
IC3157	H-3	Ⓒ
IC3158	H-4	Ⓕ
IC3159	H-4	Ⓕ
IC3160	I-3	Ⓕ
IC3161	H-2	Ⓕ
IC3162	H-2	Ⓕ
IC3163	I-2	Ⓕ
IC3164	H-3	Ⓕ
IC3165	B-2	Ⓕ
IC3166	B-2	Ⓕ
IC3167	C-2	Ⓕ
IC3168	C-2	Ⓕ
IC3169	C-2	Ⓕ
IC3171	B-3	Ⓕ
IC3172	B-5	Ⓕ
IC3201	F-4	Ⓕ
IC3202	F-4	Ⓕ
IC3203	F-4	Ⓕ
IC3204	F-4	Ⓕ
IC3205	E-4	Ⓕ
IC3206	E-4	Ⓕ
IC3207	E-4	Ⓕ
IC3208	E-4	Ⓕ
IC3501	I-1	Ⓒ
IC3501	I-1	Ⓒ
IC3502	J-2	Ⓒ
IC3503	I-2	Ⓕ
IC3504	J-2	Ⓕ
IC3505	J-2	Ⓕ
IC3507	H-1	Ⓕ
IC3508	H-1	Ⓕ
IC3601	I-2	Ⓒ
IC3601		
IC3603	I-2	Ⓕ

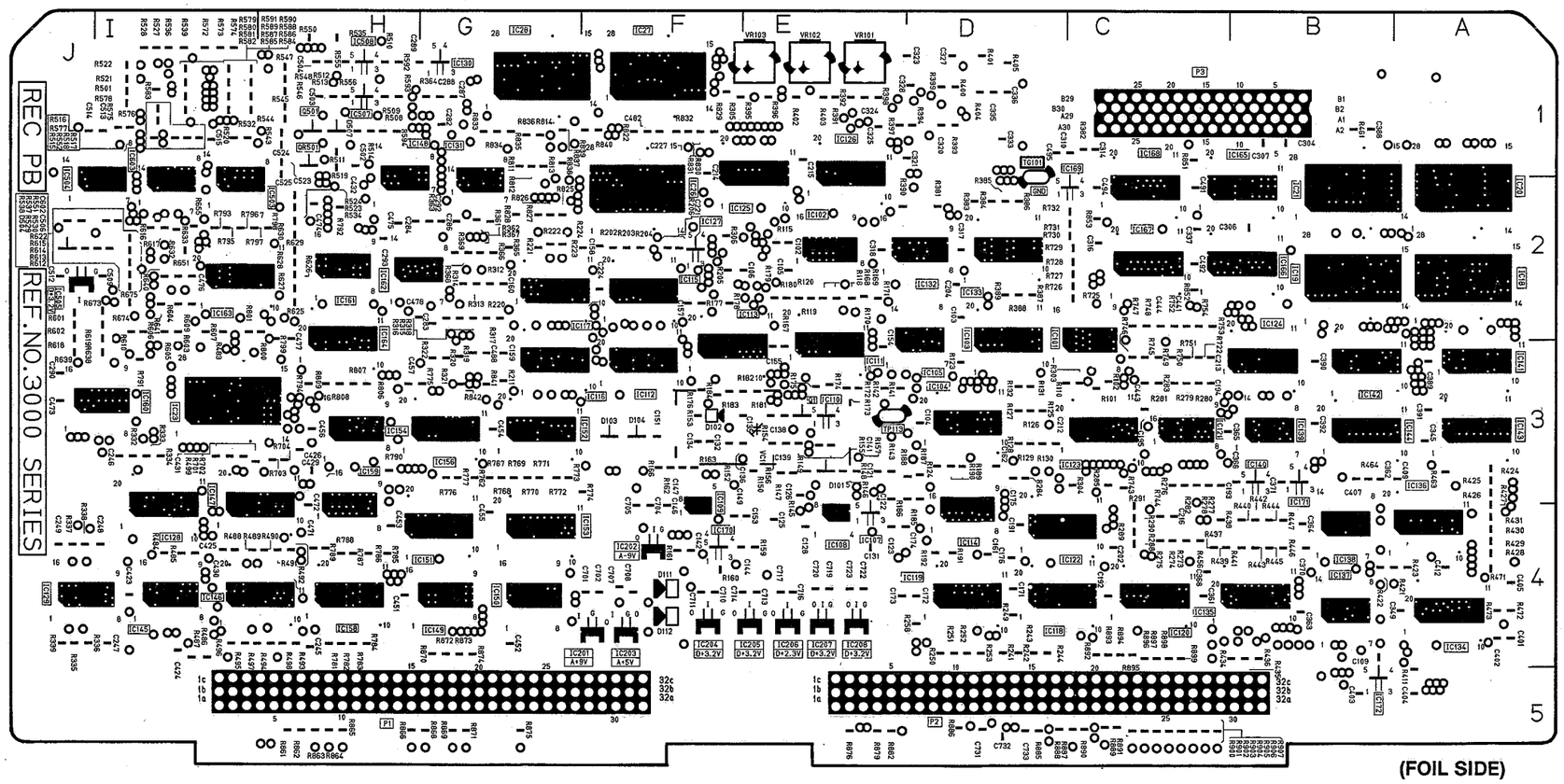
Test Points		
TG3101	D-1	
TG3102	I-5	Ⓒ
TG3501	G-1	Ⓒ
TP3101	F-1	Ⓒ
TP3102	F-1	Ⓒ
TP3103	F-1	Ⓒ
TP3104	A-1	Ⓒ
TP3105	H-2	Ⓒ
TP3106	H-2	Ⓒ
TP3108	F-1	Ⓒ
TP3109	A-1	Ⓒ
TP3110	A-1	Ⓒ
TP3111	F-1	Ⓒ
TP3112	F-1	Ⓒ
TP3113	E-3	
TP3114	A-1	Ⓒ
TP3501	G-1	Ⓒ
TP3502	G-1	Ⓒ
TP3601	G-1	Ⓒ
TP3602	G-1	Ⓒ

Adjustments	
VC3001	E-3
VR3101	E-1
VR3102	E-1
VR3103	E-1

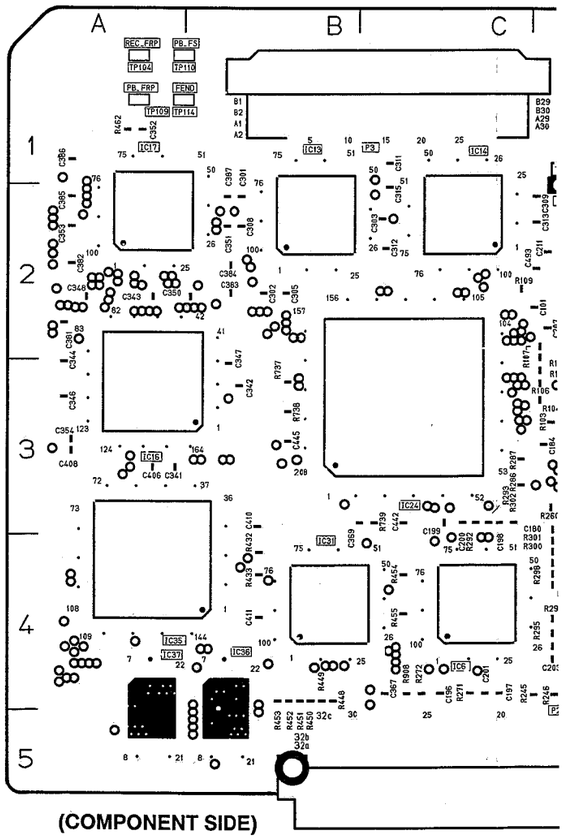
Switches	
SW3101	E-1 Ⓒ
SW3102	E-1 Ⓒ

Connectors	
P3001	G-5
P3002	D-5
P3003	C-1

ADDRESS INFORMATION
Ⓒ ... COMPONENT SIDE
Ⓕ ... FOIL SIDE



(FOIL SIDE)



(COMPONENT SIDE)

VEP83353B: AJ-D650E/D640E)

F5 REC PB

D-4	Ⓕ	IC3140	B-3	Ⓕ	IC3167	C-2	Ⓕ
F-2	Ⓕ	IC3141	A-3	Ⓕ	IC3168	C-2	Ⓕ
G-3	Ⓕ	IC3142	B-3	Ⓕ	IC3169	C-2	Ⓕ
G-2	Ⓕ	IC3143	A-3	Ⓕ	IC3171	B-3	Ⓕ
D-4	Ⓕ	IC3144	B-3	Ⓕ	IC3172	B-5	Ⓕ
D-4	Ⓕ	IC3145	I-4	Ⓕ	IC3201	F-4	Ⓕ
C-4	Ⓕ	IC3146	I-4	Ⓕ	IC3202	F-4	Ⓕ
C-3	Ⓕ	IC3147	I-4	Ⓕ	IC3203	F-4	Ⓕ
D-4	Ⓕ	IC3148	H-2	Ⓕ	IC3204	F-4	Ⓕ
C-3	Ⓕ	IC3149	G-4	Ⓕ	IC3205	E-4	Ⓕ
B-3	Ⓕ	IC3150	G-4	Ⓕ	IC3206	E-4	Ⓕ
E-1	Ⓕ	IC3151	G-4	Ⓕ	IC3207	E-4	Ⓕ
E-1	Ⓕ	IC3152	G-3	Ⓕ	IC3208	E-4	Ⓕ
F-2	Ⓕ	IC3153	G-4	Ⓕ	IC3501	I-1	Ⓒ
I-4	Ⓕ	IC3154	H-3	Ⓕ	IC3501	I-1	Ⓒ
J-4	Ⓕ	IC3156	G-3	Ⓕ	IC3502	J-2	Ⓒ
G-1	Ⓕ	IC3157	H-3	Ⓒ	IC3503	I-2	Ⓕ
G-2	Ⓕ	IC3158	H-4	Ⓕ	IC3504	J-2	Ⓕ
D-2	Ⓕ	IC3159	H-4	Ⓕ	IC3505	J-2	Ⓕ
D-2	Ⓕ	IC3160	I-3	Ⓕ	IC3507	H-1	Ⓕ
A-4	Ⓕ	IC3161	H-2	Ⓕ	IC3508	H-1	Ⓕ
B-4	Ⓕ	IC3162	H-2	Ⓕ	IC3601	I-2	Ⓒ
A-4	Ⓕ	IC3163	I-2	Ⓕ	IC3601		
B-4	Ⓕ	IC3164	H-3	Ⓕ	IC3603	I-2	Ⓕ
B-4	Ⓕ	IC3165	B-2	Ⓕ			
B-3	Ⓕ	IC3166	B-2	Ⓕ			

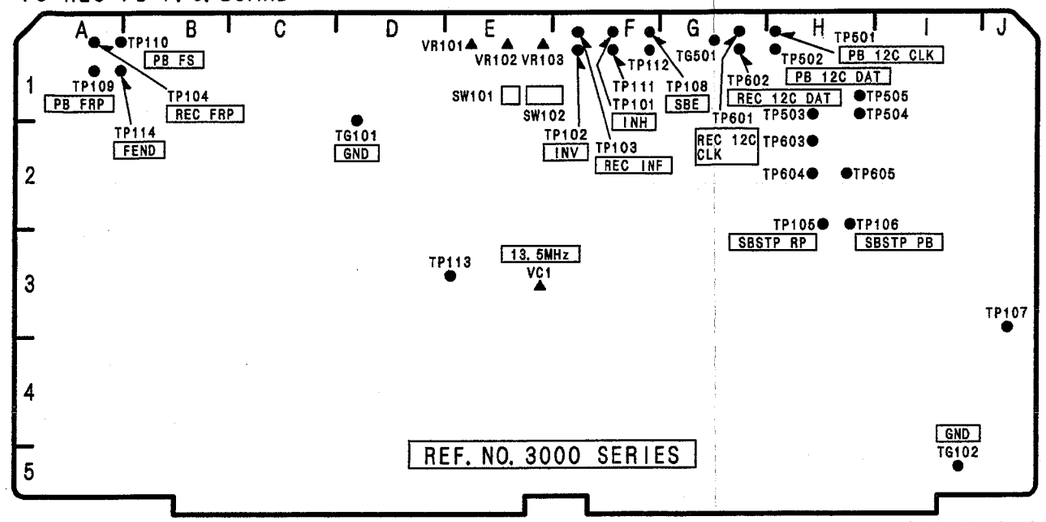
Test Points		
TG3101	D-1	
TG3102	I-5	Ⓒ
TG3501	G-1	Ⓒ
TP3101	F-1	Ⓒ
TP3102	F-1	Ⓒ
TP3103	F-1	Ⓒ
TP3104	A-1	Ⓒ
TP3105	H-2	Ⓒ
TP3106	H-2	Ⓒ
TP3108	F-1	Ⓒ
TP3109	A-1	Ⓒ
TP3110	A-1	Ⓒ
TP3111	F-1	Ⓒ
TP3112	F-1	Ⓒ
TP3113	E-3	
TP3114	A-1	Ⓒ
TP3501	G-1	Ⓒ
TP3502	G-1	Ⓒ
TP3601	G-1	Ⓒ
TP3602	G-1	Ⓒ

Adjustments	
VC3001	E-3
VR3101	E-1
VR3102	E-1
VR3103	E-1

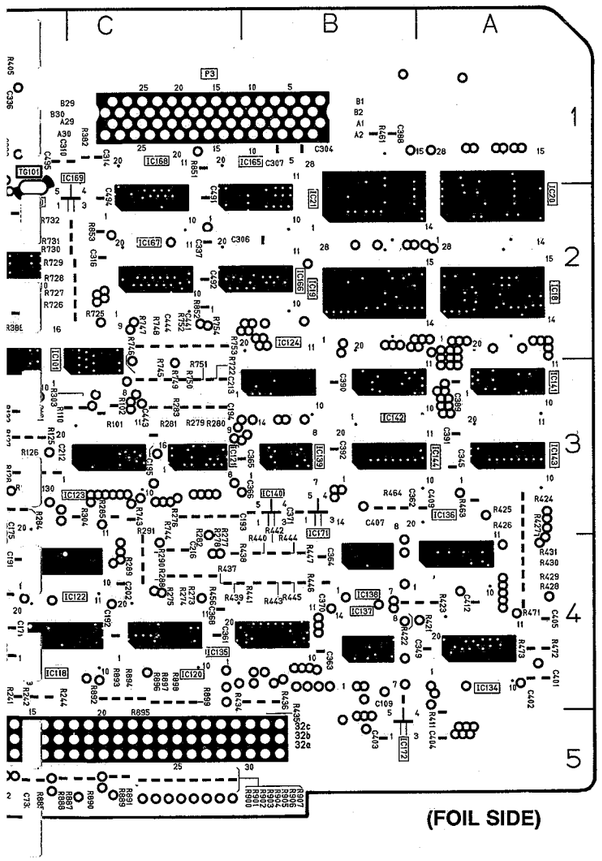
Switches		
SW3101	E-1	Ⓒ
SW3102	E-1	Ⓒ

Connectors	
P3001	G-5
P3002	D-5
P3003	C-1

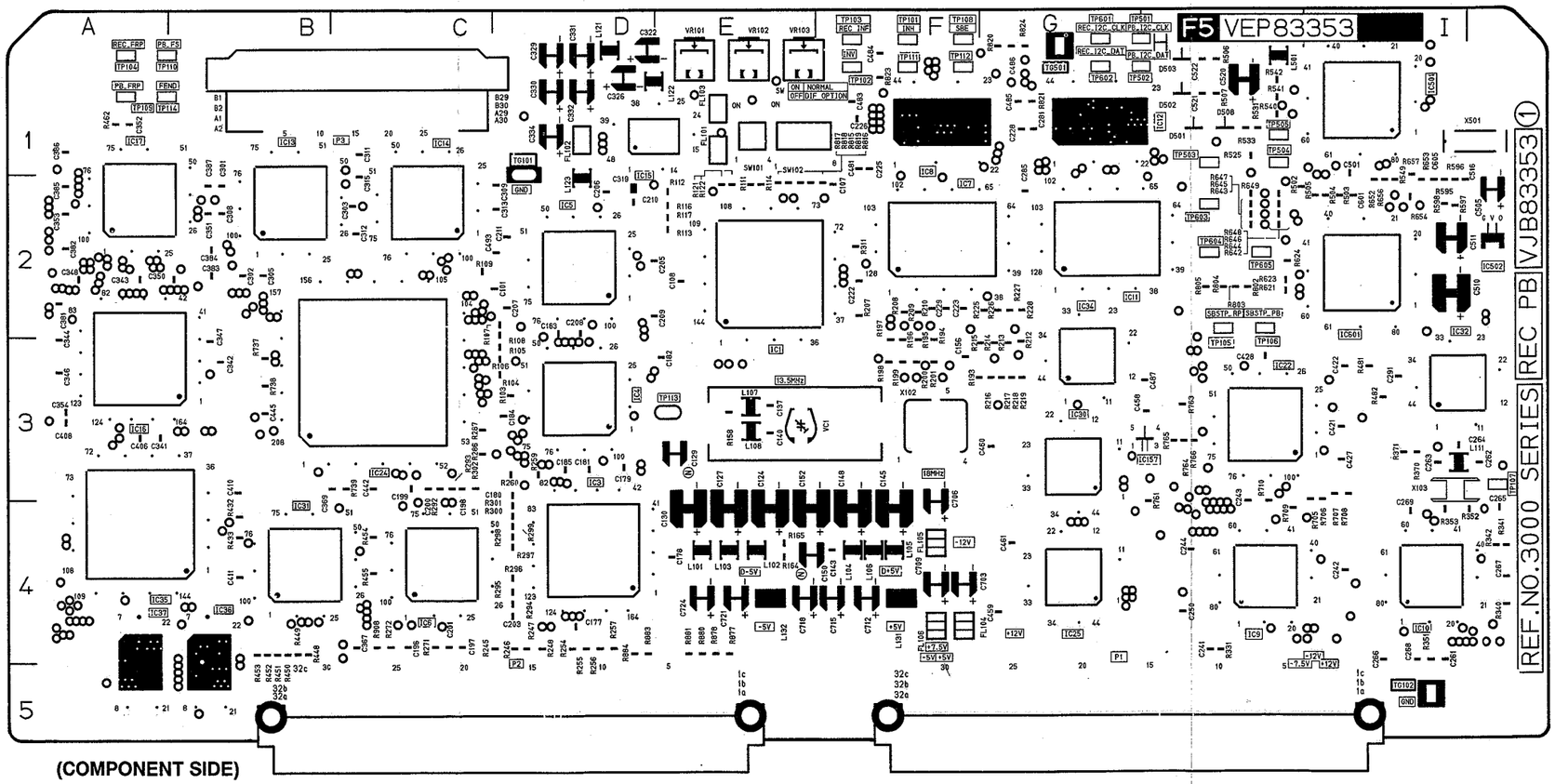
F5 REC PB P. C. BOARD



(COMPONENT SIDE)



(FOIL SIDE)



(COMPONENT SIDE)

F6 V IN P.C. BOARD (VEP83355A: AJ-D650/D640/D650P/D640P / VEP83355B: AJ-D650E/D640E)

F6 V IN

Transistors

Q8251	I-4	Ⓕ
Q8252	I-3	Ⓕ
Q8253	I-5	Ⓕ
Q8301	I-3	Ⓕ
Q8302	I-3	Ⓕ
Q8303	I-3	Ⓕ
Q8351	I-2	Ⓕ
Q8352	H-2	Ⓕ
Q8401	E-2	Ⓕ
Q8451	H-1	Ⓕ
Q8452	H-1	Ⓕ
Q8453	G-1	Ⓕ
Q8454	G-1	Ⓕ
Q8455	G-1	Ⓕ
Q8456	G-1	Ⓕ
Q8457	G-1	Ⓕ
Q8458	F-1	Ⓕ
Q8459	F-1	Ⓕ
Q8460	F-1	Ⓒ
Q8461	F-1	Ⓒ
Q8462	E-1	Ⓕ
Q8463	F-1	Ⓕ
Q8464	F-1	Ⓕ
Q8465	F-1	Ⓒ
Q8466	E-1	Ⓒ
Q8467	F-1	Ⓕ
Q8551	F-3	Ⓒ
Q8552	F-3	Ⓒ
Q8553	F-3	Ⓒ
Q8554	F-3	Ⓒ
Q8601	E-1	Ⓒ
Q8602	E-2	Ⓒ
Q8603	E-1	Ⓒ
Q8604	E-2	Ⓒ
Q8605	E-2	Ⓕ
Q8606	D-1	Ⓕ
Q8607	D-2	Ⓕ
Q8608	D-1	Ⓕ
Q8651	D-3	Ⓕ
Q8652	D-3	Ⓕ
Q8653	C-3	Ⓕ
Q8654	D-3	Ⓕ
Q8655	D-2	Ⓕ
Q8656	E-3	Ⓕ
Q8701	C-2	Ⓕ
Q8702	B-2	Ⓕ
Q8703	B-2	Ⓕ
Q8704	C-2	Ⓒ
Q8705	C-2	Ⓕ
Q8706	C-2	Ⓕ
Q8751	C-1	Ⓕ
Q8752	B-1	Ⓕ
Q8753	B-1	Ⓕ
Q8754	C-1	Ⓒ
Q8755	C-1	Ⓕ
Q8756	C-1	Ⓕ

Transistor-Resistors

QR8151	E-4	Ⓕ
QR8501	H-3	Ⓕ

Integrated Circuits

IC8051	I-4	
IC8052	I-4	
IC8053	I-5	
IC8054	H-4	
IC8101	H-4	Ⓕ
IC8102	G-4	Ⓕ
IC8103	G-4	Ⓕ
IC8107	F-4	Ⓕ
IC8109	F-4	Ⓒ
IC8110	G-4	Ⓒ
IC8111	F-4	Ⓒ
IC8151	D-4	Ⓕ
IC8152	D-4	Ⓕ
IC8153	E-4	Ⓒ
IC8154	D-4	Ⓒ
IC8155	E-4	Ⓒ
IC8156	D-4	Ⓒ
IC8161	E-4	Ⓒ
IC8164	D-4	Ⓒ
IC8165	E-4	Ⓒ
IC8201	C-4	Ⓒ
IC8202	C-4	Ⓒ
IC8203	B-4	Ⓒ
IC8204	B-4	Ⓒ
IC8205	C-4	Ⓒ
IC8210	C-4	Ⓒ
IC8251	H-3	Ⓒ
IC8252	I-3	Ⓕ
IC8254	J-3	Ⓕ
IC8255	H-4	Ⓕ
IC8256	H-4	Ⓕ
IC8257	I-4	Ⓕ
IC8258	I-4	Ⓕ
IC8259	H-4	Ⓒ
IC8301	H-3	Ⓕ
IC8302	H-3	Ⓕ
IC8303	I-3	Ⓒ
IC8304	J-3	Ⓒ
IC8308	J-2	Ⓒ
IC8309	I-2	Ⓕ
IC8351	I-2	Ⓕ
IC8352	I-2	Ⓕ
IC8353	H-3	Ⓕ
IC8354	I-2	Ⓒ
IC8355	I-1	Ⓒ
IC8356	I-2	Ⓒ
IC8357	I-1	Ⓒ
IC8358	H-1	Ⓒ
IC8359	I-1	Ⓒ
IC8401	H-2	Ⓕ
IC8402	G-2	Ⓒ
IC8402	H-2	Ⓒ
IC8403	G-2	Ⓒ
IC8404	H-2	Ⓒ
IC8406	E-1	Ⓕ
IC8407	E-2	Ⓕ
IC8410	F-2	Ⓒ
IC8414	F-2	Ⓒ
IC8418	F-2	Ⓒ
IC8419	H-3	Ⓕ
IC8423	G-2	Ⓒ
IC8428	H-3	Ⓒ
IC8451	H-1	Ⓒ
IC8452	G-1	Ⓒ
IC8453	G-1	Ⓒ
IC8455	F-1	Ⓒ
IC8456	F-1	Ⓒ
IC8459	F-2	Ⓕ
IC8460	F-2	Ⓕ
IC8501	H-3	Ⓕ
IC8502	H-3	Ⓕ
IC8503	G-3	Ⓕ
IC8504	G-3	Ⓒ
IC8507	H-3	Ⓒ
IC8551	F-3	Ⓒ
IC8552	F-3	Ⓒ
IC8554	E-3	Ⓒ
IC8557	F-3	Ⓕ
IC8560	F-3	Ⓕ
IC8561	F-3	Ⓕ
IC8562	E-3	Ⓕ
IC8567	F-3	Ⓒ
IC8651	D-2	Ⓕ
IC8652	D-2	Ⓕ
IC8653	D-3	Ⓕ
IC8655	D-3	Ⓒ
IC8656	C-3	Ⓒ
IC8660	C-3	Ⓒ
IC8661	C-3	Ⓕ
IC8701	D-2	Ⓕ
IC8702	D-2	Ⓕ
IC8703	D-2	Ⓕ
IC8705	C-2	Ⓒ
IC8706	A-2	Ⓒ
IC8710	A-2	Ⓒ
IC8711	A-2	Ⓕ
IC8751	D-1	Ⓕ
IC8752	D-1	Ⓕ
IC8753	C-1	Ⓕ
IC8755	C-1	Ⓒ
IC8756	B-1	Ⓒ
IC8760	A-1	Ⓒ
IC8761	A-1	Ⓕ
IC8801	A-3	Ⓕ
IC8802	B-3	Ⓒ
IC8803	B-3	Ⓕ
IC8804	B-3	Ⓒ
IC8851	A-5	Ⓕ
IC8853	B-4	Ⓕ
IC8854	B-4	Ⓒ
IC8855	A-4	Ⓒ
IC8856	A-4	Ⓒ
IC8857	B-5	Ⓒ
IC8858	A-5	Ⓒ

Test Points

TG8001	B-1
TG8002	H-1
TG8003	B-4
TG8004	E-3
TG8005	D-1
TG8006	F-4
TP8301	I-2
TP8401	F-2
TP8403	G-2
TP8404	F-4
TP8405	G-2
TP8451	H-1
TP8551	F-3
TP8552	E-3
TP8553	F-2
TP8651	C-3
TP8701	A-2
TP8751	B-1

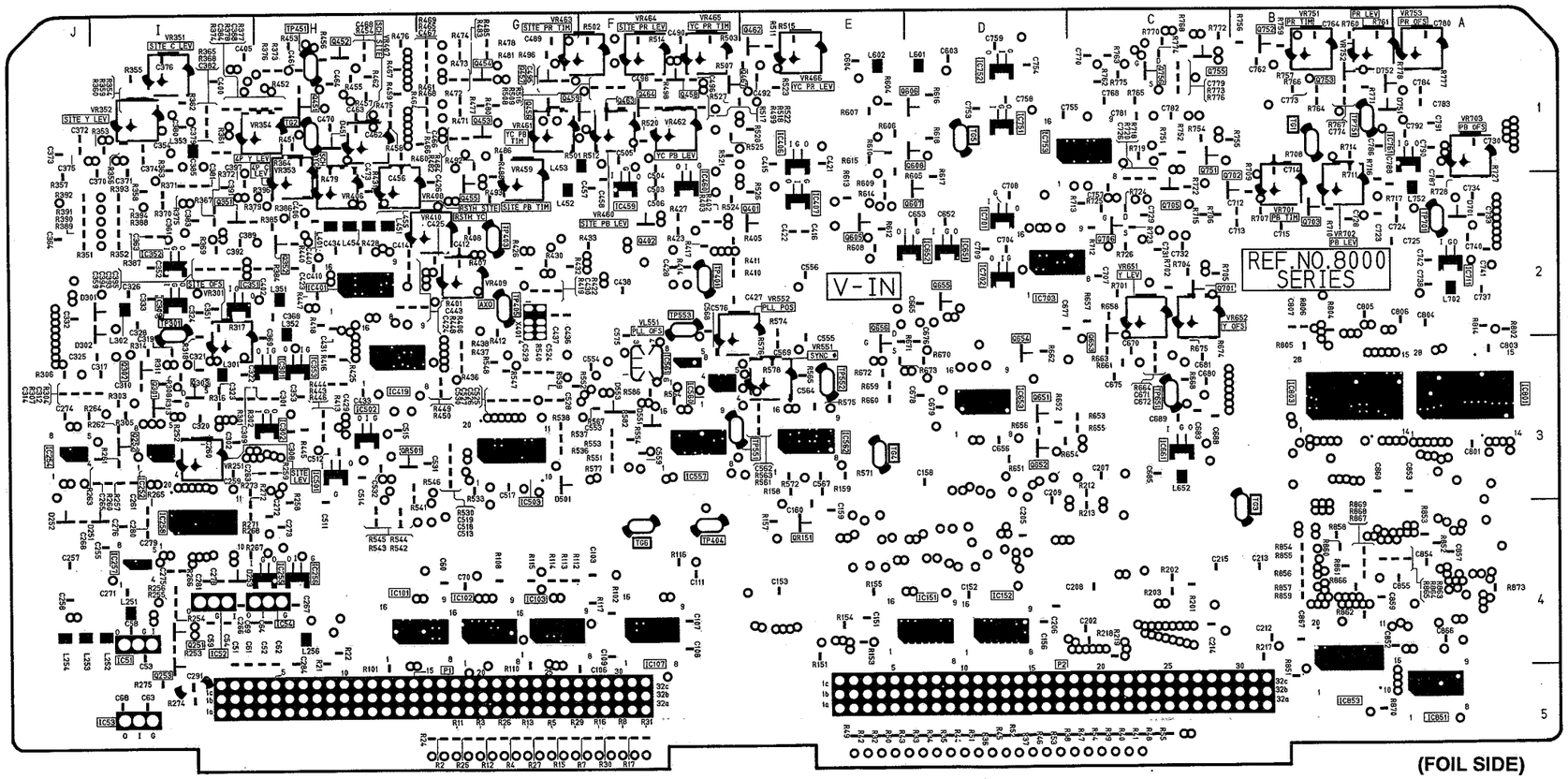
Adjustments

VL8551	F-2
VR8251	I-3
VR8301	I-2
VR8351	I-1
VR8352	I-1
VR8353	H-1
VR8354	H-1
VR8406	H-2
VR8407	H-1
VR8408	H-2
VR8409	G-2
VR8410	G-2
VR8459	G-2
VR8460	F-1
VR8461	G-1
VR8462	F-1
VR8463	F-1
VR8464	F-1
VR8465	F-1
VR8466	E-1
VR8551	E-3
VR8552	E-2
VR8651	C-2
VR8652	C-2
VR8701	B-2
VR8702	B-2
VR8703	A-1
VR8751	B-1
VR8752	B-1
VR8753	A-1

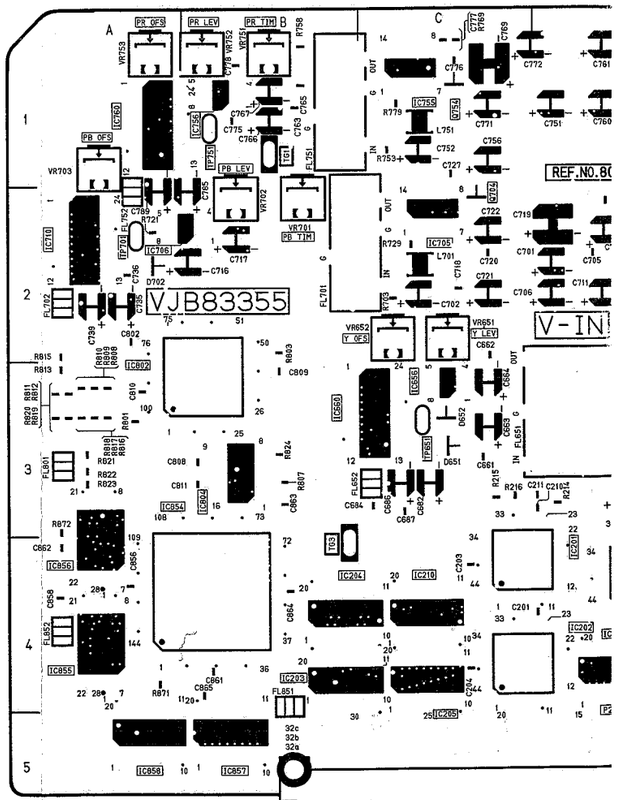
Connectors

P8001	G-5
P8002	D-5

ADDRESS INFORMATION
Ⓒ ... COMPONENT SIDE
Ⓕ ... FOIL SIDE



(FOIL SIDE)

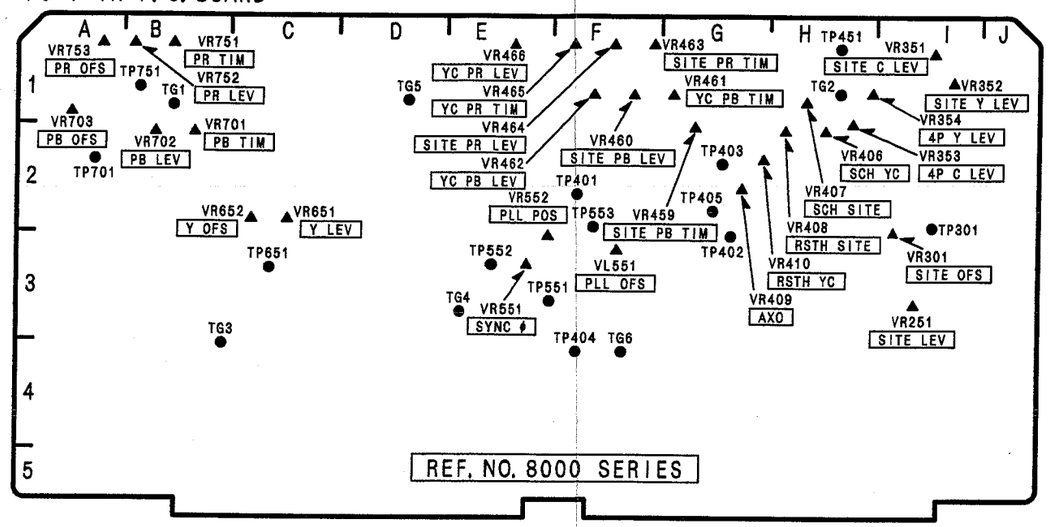


(COMPONENT SIDE)

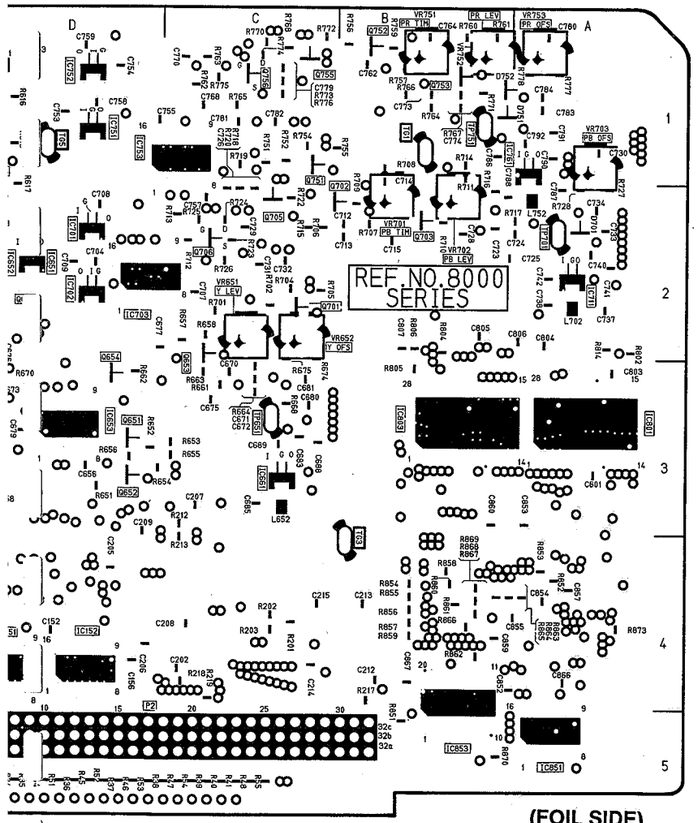
F6 V IN

B-4	©	IC8403	G-2	©	IC8567	F-3	©	IC8855	A-4	©	VR8351	I-1	**Connectors**		
C-4	©	IC8404	H-2	©	IC8651	D-2	Ⓕ	IC8856	A-4	©	VR8352	I-1	P8001	G-5	
C-4	©	IC8406	E-1	Ⓕ	IC8652	D-2	Ⓕ	IC8857	B-5	©	VR8353	H-1	P8002	D-5	
H-3	©	IC8407	E-2	Ⓕ	IC8653	D-3	Ⓕ	IC8858	A-5	©	VR8354	H-1			
I-3	Ⓕ	IC8410	F-2	©	IC8655	D-3	©	**Test Points**			VR8406	H-2			
J-3	Ⓕ	IC8414	F-2	©	IC8656	C-3	©				VR8407	H-1			
H-4	Ⓕ	IC8418	F-2	©	IC8660	C-3	©	TG8001	B-1		VR8408	H-2			
H-4	Ⓕ	IC8419	H-3	Ⓕ	IC8661	C-3	Ⓕ	TG8002	H-1		VR8409	G-2			
I-4	Ⓕ	IC8423	G-2	©	IC8701	D-2	Ⓕ	TG8003	B-4		VR8410	G-2			
I-4	Ⓕ	IC8428	H-3	©	IC8702	D-2	Ⓕ	TG8004	E-3		VR8459	G-2			
H-4	©	IC8451	H-1	©	IC8703	D-2	Ⓕ	TG8005	D-1		VR8460	F-1			
H-3	Ⓕ	IC8452	G-1	©	IC8705	C-2	©	TG8006	F-4		VR8461	G-1			
H-3	Ⓕ	IC8453	G-1	©	IC8706	A-2	©	TP8301	I-2		VR8462	F-1			
I-3	©	IC8455	F-1	©	IC8710	A-2	©	TP8401	F-2		VR8463	F-1			
J-3	©	IC8456	F-1	©	IC8711	A-2	Ⓕ	TP8403	G-2		VR8464	F-1			
J-2	©	IC8459	F-2	Ⓕ	IC8751	D-1	Ⓕ	TP8404	F-4		VR8465	F-1			
I-2	Ⓕ	IC8460	F-2	Ⓕ	IC8752	D-1	Ⓕ	TP8405	G-2		VR8466	E-1			
I-2	Ⓕ	IC8501	H-3	Ⓕ	IC8753	C-1	Ⓕ	TP8451	H-1		VR8551	E-3			
I-2	Ⓕ	IC8502	H-3	Ⓕ	IC8755	C-1	©	TP8551	F-3		VR8552	E-2			
H-3	Ⓕ	IC8503	G-3	Ⓕ	IC8756	B-1	©	TP8552	E-3		VR8651	C-2			
I-2	©	IC8504	G-3	©	IC8760	A-1	©	TP8553	F-2		VR8652	C-2			
I-1	©	IC8507	H-3	©	IC8761	A-1	Ⓕ	TP8651	C-3		VR8701	B-2			
I-2	©	IC8551	F-3	©	IC8801	A-3	Ⓕ	TP8701	A-2		VR8702	B-2			
I-1	©	IC8552	F-3	©	IC8802	B-3	©	TP8751	B-1		VR8703	A-1			
H-1	©	IC8554	E-3	©	IC8803	B-3	Ⓕ	**Adjustments**			VR8751	B-1			
I-1	©	IC8557	F-3	Ⓕ	IC8804	B-3	©				VR8752	B-1			
H-2	Ⓕ	IC8560	F-3	Ⓕ	IC8851	A-5	Ⓕ	VL8551	F-2		VR8753	A-1			
G-2	©	IC8561	F-3	Ⓕ	IC8853	B-4	Ⓕ	VR8251	I-3						
H-2	©	IC8562	E-3	Ⓕ	IC8854	B-4	©	VR8301	I-2						

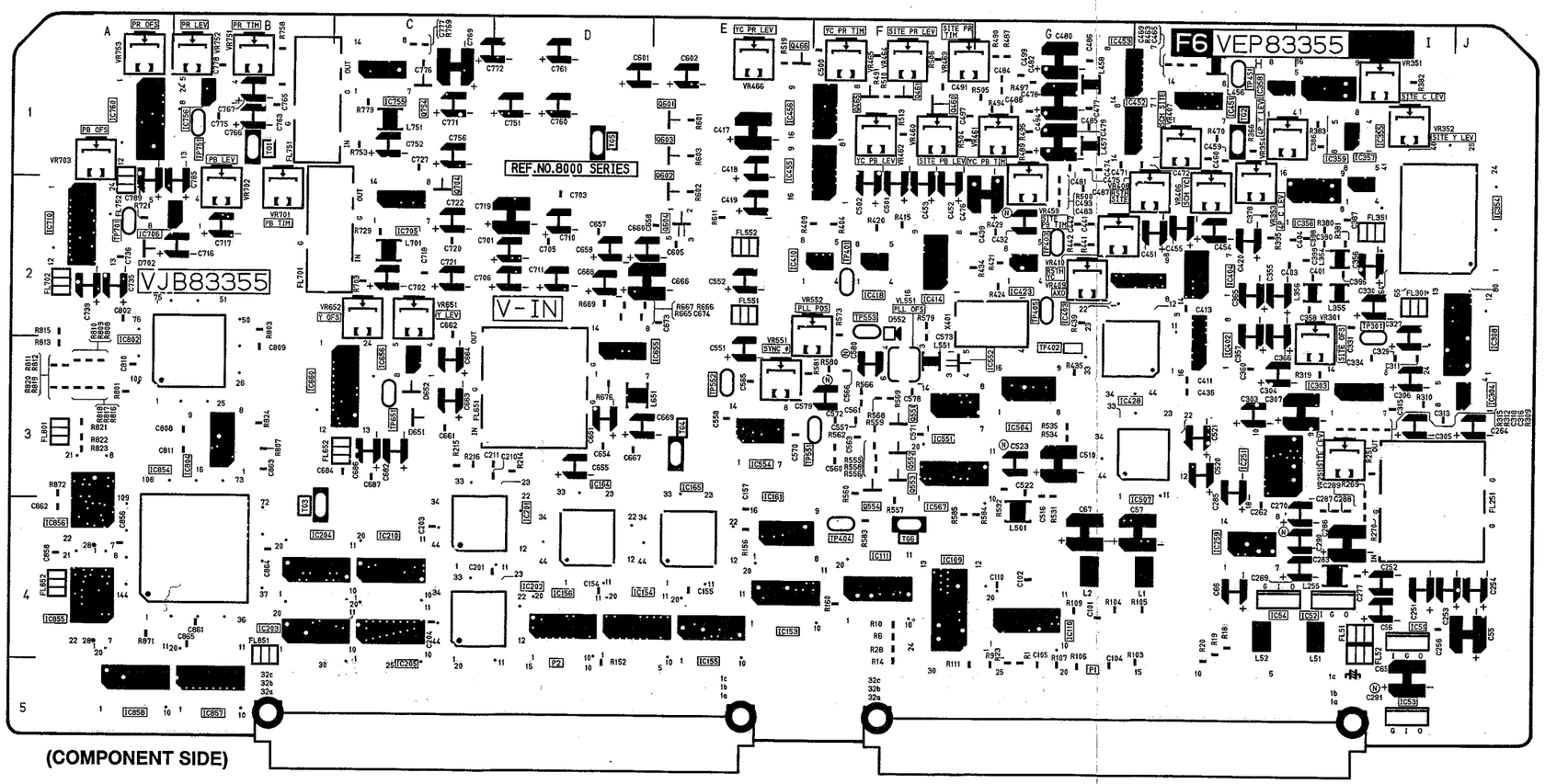
F6 V IN P. C. BOARD



(COMPONENT SIDE)



(FOIL SIDE)



(COMPONENT SIDE)

F7 A PROC P.C. BOARD (VEP84292A)

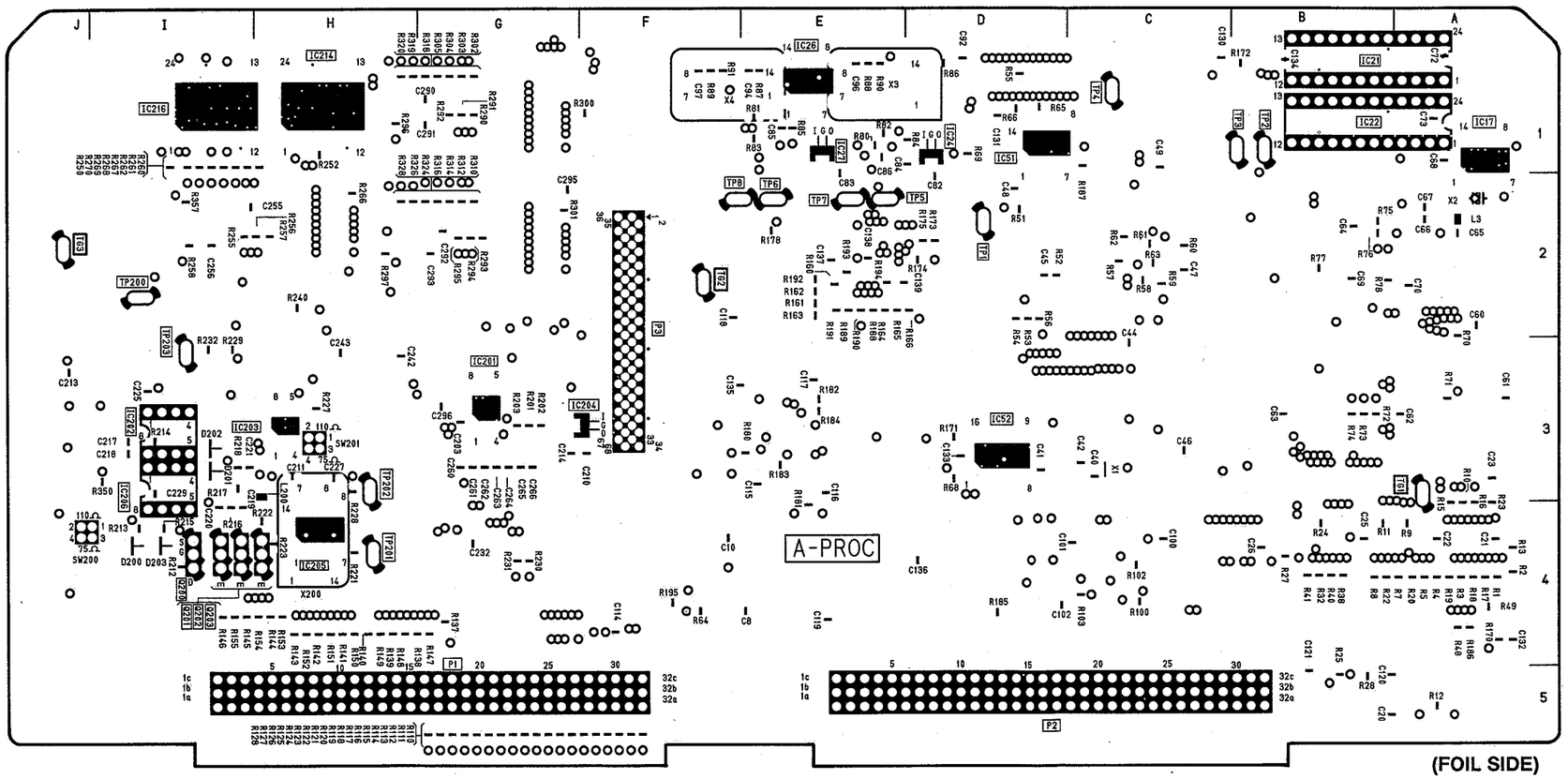
F7

1
2
3
4
5

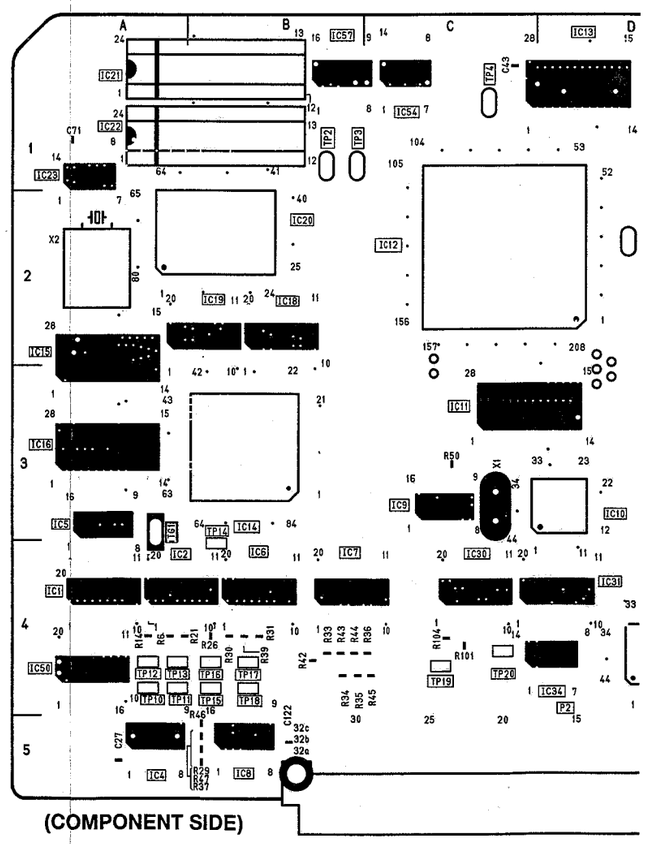
F7 A PROC

Integrated Circuits			IC24	D-1	Ⓕ	IC50	A-4	Ⓒ	TP7	E-2	
IC1	A-4	Ⓒ	IC25	E-1	Ⓒ	IC51	D-1	Ⓕ	TP8	F-2	
IC2	B-4	Ⓒ	IC26	E-1	Ⓕ	IC52	D-3	Ⓕ	TP10	A-4	Ⓒ
IC4	A-5	Ⓒ	IC27	E-1	Ⓕ	IC53	F-3	Ⓒ	TP11	A-4	Ⓒ
IC5	A-3	Ⓒ	IC28	E-1	Ⓒ	IC54	C-1	Ⓒ	TP12	A-4	Ⓒ
IC6	B-4	Ⓒ	IC30	C-4	Ⓒ	IC55	E-2	Ⓒ	TP13	A-4	Ⓒ
IC7	B-4	Ⓒ	IC31	D-4	Ⓒ	IC56	E-2	Ⓒ	TP14	B-3	Ⓒ
IC8	B-5	Ⓒ	IC34	D-4	Ⓒ	IC57	B-1	Ⓒ	TP15	B-4	Ⓒ
IC9	C-3	Ⓒ	IC35	G-4	Ⓒ	IC58	D-4	Ⓒ	TP16	B-4	Ⓒ
IC10	D-3	Ⓒ	IC36	G-4	Ⓒ				TP17	B-4	Ⓒ
IC11	C-3	Ⓕ	IC37	H-4	Ⓒ	**Test Points**			TP18	B-4	Ⓒ
IC12	C-2	Ⓒ	IC38	I-4	Ⓒ	TG1	A-3		TP19	C-4	Ⓒ
IC13	D-1	Ⓒ	IC39	H-4	Ⓒ	TG2	F-2		TP20	C-4	Ⓒ
IC14	B-3	Ⓒ	IC40	I-4	Ⓒ	TG3	J-2		**Connectors**		
IC15	A-2	Ⓒ	IC41	F-4	Ⓒ	TP1	D-2		P1	G-5	
IC16	A-3	Ⓒ	IC42	F-3	Ⓒ	TP2	B-1		P2	D-5	
IC17	A-1	Ⓕ	IC43	E-4	Ⓒ	TP3	B-1		P3	F-2	
IC19	B-2	Ⓒ	IC44	E-3	Ⓒ	TP4	C-1				
IC20	B-2	Ⓒ	IC45	E-3	Ⓒ	TP5	E-2				
IC23	A-1	Ⓒ	IC46	F-2	Ⓒ	TP6	E-2				

ADDRESS INFORMATION
Ⓒ ... COMPONENT SIDE
Ⓕ ... FOIL SIDE



(FOIL SIDE)



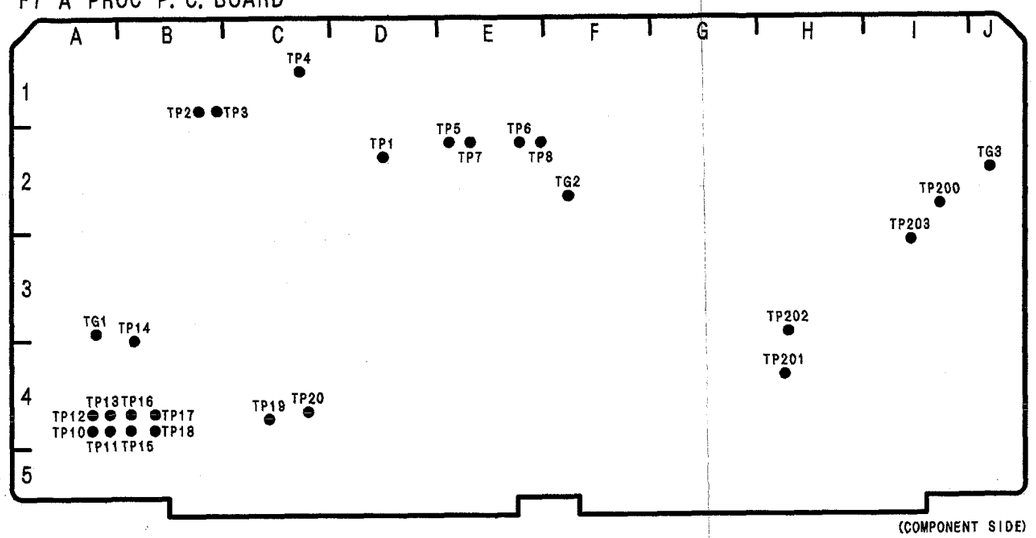
(COMPONENT SIDE)

F7 A PROC

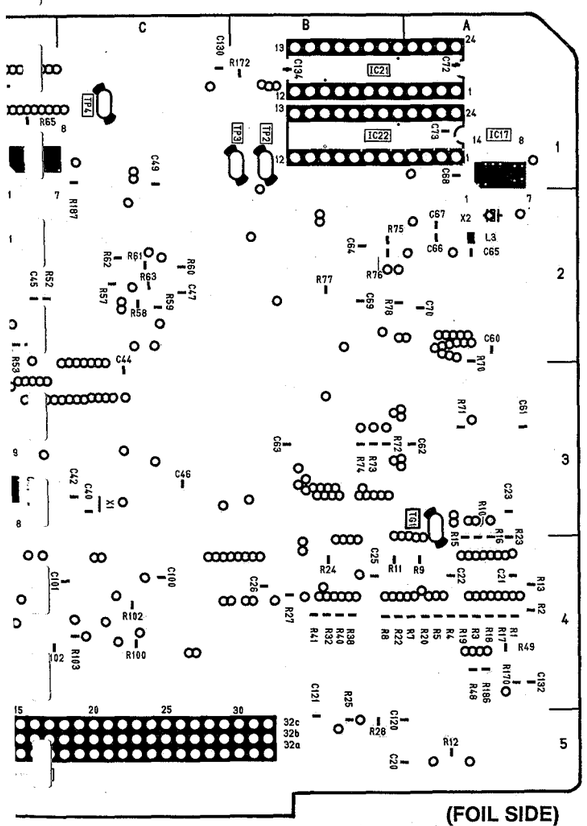
Integrated Circuits			IC24	D-1	Ⓕ	IC50	A-4	Ⓒ	TP7	E-2	
IC1	A-4	Ⓒ	IC25	E-1	Ⓒ	IC51	D-1	Ⓕ	TP8	F-2	
IC2	B-4	Ⓒ	IC26	E-1	Ⓕ	IC52	D-3	Ⓕ	TP10	A-4	Ⓒ
IC4	A-5	Ⓒ	IC27	E-1	Ⓕ	IC53	F-3	Ⓒ	TP11	A-4	Ⓒ
IC5	A-3	Ⓒ	IC28	E-1	Ⓒ	IC54	C-1	Ⓒ	TP12	A-4	Ⓒ
IC6	B-4	Ⓒ	IC30	C-4	Ⓒ	IC55	E-2	Ⓒ	TP13	A-4	Ⓒ
IC7	B-4	Ⓒ	IC31	D-4	Ⓒ	IC56	E-2	Ⓒ	TP14	B-3	Ⓒ
IC8	B-5	Ⓒ	IC34	D-4	Ⓒ	IC57	B-1	Ⓒ	TP15	B-4	Ⓒ
IC9	C-3	Ⓒ	IC35	G-4	Ⓒ	IC58	D-4	Ⓒ	TP16	B-4	Ⓒ
IC10	D-3	Ⓒ	IC36	G-4	Ⓒ	**Test Points**			TP17	B-4	Ⓒ
IC11	C-3	Ⓒ	IC37	H-4	Ⓒ				TP18	B-4	Ⓒ
IC12	C-2	Ⓒ	IC38	I-4	Ⓒ	TG1	A-3		TP19	C-4	Ⓒ
IC13	D-1	Ⓒ	IC39	H-4	Ⓒ	TG2	F-2		TP20	C-4	Ⓒ
IC14	B-3	Ⓒ	IC40	I-4	Ⓒ	TG3	J-2		**Connectors**		
IC15	A-2	Ⓒ	IC41	F-4	Ⓒ	TP1	D-2		P1	G-5	
IC16	A-3	Ⓒ	IC42	F-3	Ⓒ	TP2	B-1		P2	D-5	
IC17	A-1	Ⓕ	IC43	E-4	Ⓒ	TP3	B-1		P3	F-2	
IC19	B-2	Ⓒ	IC44	E-3	Ⓒ	TP4	C-1				
IC20	B-2	Ⓒ	IC45	E-3	Ⓒ	TP5	E-2				
IC23	A-1	Ⓒ	IC46	F-2	Ⓒ	TP6	E-2				

ADDRESS INFORMATION
Ⓒ ... COMPONENT SIDE
Ⓕ ... FOIL SIDE

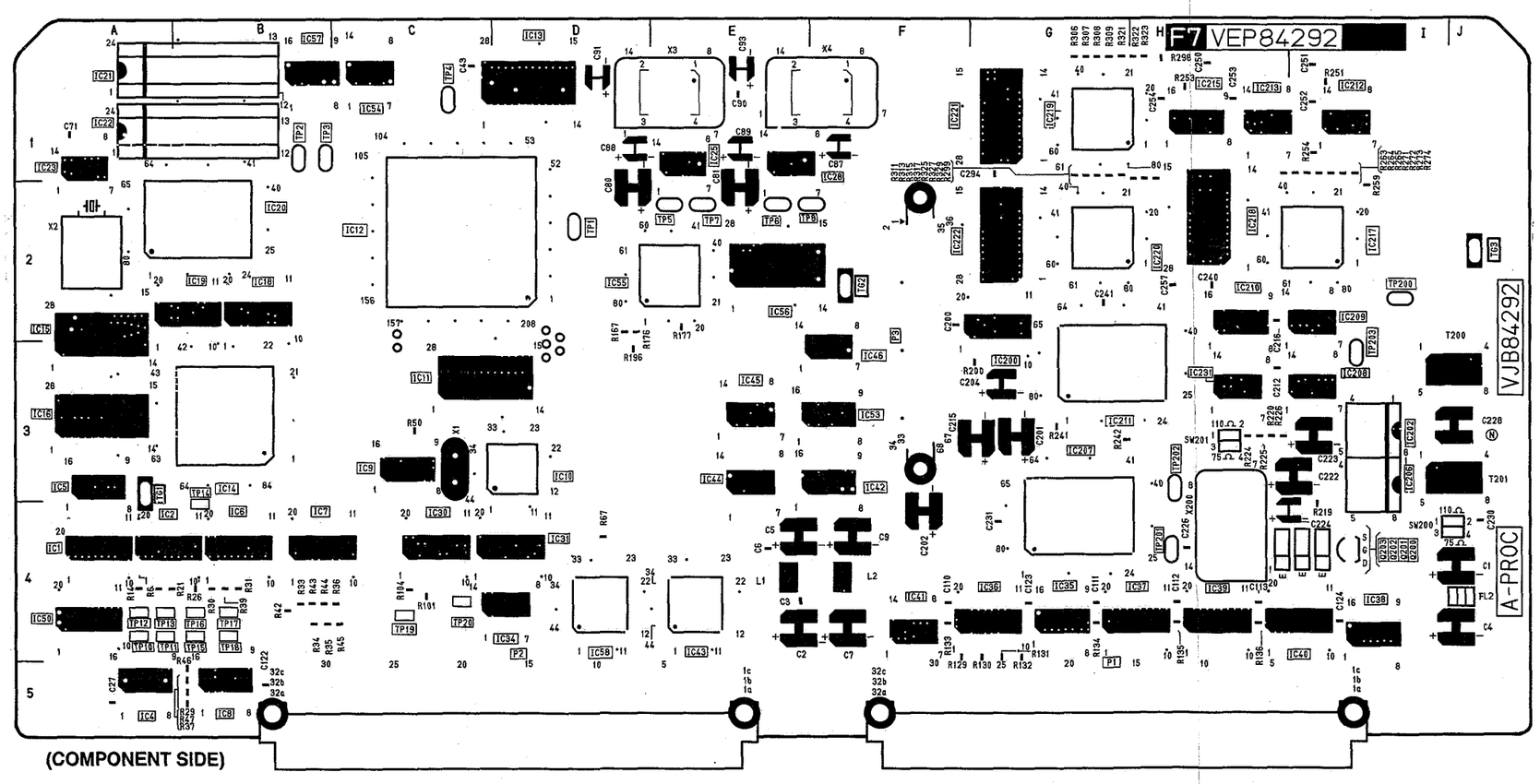
F7 A PROC P. C. BOARD



(COMPONENT SIDE)



(FOIL SIDE)



(COMPONENT SIDE)

F8 ADDA CUE P.C. BOARD (VEP84293A: AJ-D650/D640/D650P/D640P / VEP84293B: AJ-D650E/D640E)

F8 ADDA

Transistors

Ref.	Address	Side
Q4221	G-3	
Q4222	G-3	
Q4223	G-3	
Q4224	G-3	
Q4225	G-2	Ⓕ
Q4226	G-3	Ⓒ
Q4227	G-3	Ⓒ
Q4228	G-3	Ⓒ
Q4229	G-3	Ⓒ
Q4230	G-2	Ⓕ
Q4281	F-3	
Q4282	F-3	
Q4283	F-3	
Q4284	F-3	
Q4285	F-2	Ⓕ
Q4286	E-3	Ⓒ
Q4287	F-3	Ⓒ
Q4288	F-3	Ⓒ
Q4289	F-3	Ⓒ
Q4290	F-2	Ⓕ
Q4341	E-3	Ⓕ
Q4342	E-3	Ⓒ
Q4343	E-3	Ⓒ
Q4344	E-3	Ⓕ
Q4345	E-2	Ⓕ
Q4346	D-2	Ⓕ
Q4347	D-3	Ⓕ
Q4348	E-3	Ⓕ
Q4350	D-3	Ⓕ
Q4381	B-3	Ⓒ
Q4382	C-3	Ⓒ
Q4383	B-3	Ⓒ
Q4384	C-3	Ⓕ
Q4385	C-3	Ⓕ
Q4386	C-3	Ⓒ
Q4461	D-1	Ⓕ
Q4462	D-1	Ⓕ
Q4463	D-1	Ⓕ
Q4501	A-2	Ⓒ
Q4502	A-2	Ⓕ
Q4503	A-2	Ⓕ
Q4504	B-2	Ⓕ
Q4505	A-1	Ⓕ
Q4506	B-1	Ⓕ
Q4507	A-2	Ⓕ
Q4508	A-2	Ⓕ
Q4509	B-2	Ⓕ
Q4510	B-2	Ⓕ
Q4511	A-2	Ⓕ
Q4512	A-2	Ⓕ
Q4513	A-2	Ⓕ

Transistor-Resistors

Ref.	Address	Side
QR4191	F-1	Ⓕ
QR4341	E-4	Ⓕ
QR4342	E-4	Ⓕ
QR4381	C-3	Ⓕ
QR4382	C-3	Ⓒ

Integrated Circuits

Ref.	Address	Side
IC4001	I-4	Ⓕ
IC4002	I-5	Ⓕ
IC4003	I-3	Ⓒ
IC4004	I-4	Ⓒ
IC4005	I-3	Ⓒ
IC4006	J-3	Ⓒ
IC4008	I-3	Ⓒ
IC4061	I-4	Ⓕ
IC4062	H-4	Ⓕ
IC4063	H-3	Ⓒ
IC4064	H-4	Ⓒ
IC4065	H-3	Ⓒ
IC4066	I-3	Ⓒ
IC4068	H-3	Ⓒ
IC4121	I-2	Ⓒ
IC4122	H-2	Ⓒ
IC4123	I-1	Ⓒ
IC4124	J-2	Ⓕ
IC4125	I-2	Ⓕ
IC4126	H-2	Ⓕ
IC4127	I-2	Ⓒ
IC4128	H-2	Ⓒ
IC4129	H-1	Ⓒ
IC4131	I-2	Ⓕ
IC4191	F-1	Ⓕ
IC4192	G-1	Ⓒ
IC4193	F-1	Ⓒ
IC4194	G-1	Ⓕ
IC4195	E-1	Ⓕ
IC4221	G-4	Ⓕ
IC4222	G-4	Ⓕ
IC4223	G-2	Ⓒ
IC4224	G-2	Ⓒ
IC4225	G-3	Ⓒ
IC4226	G-2	Ⓕ
IC4281	F-2	Ⓒ
IC4282	E-2	Ⓒ
IC4283	F-3	Ⓒ
IC4284	E-2	Ⓕ
IC4341	E-1	Ⓕ
IC4342	E-2	Ⓕ
IC4343	E-2	Ⓒ
IC4344	E-1	Ⓒ
IC4345	E-2	Ⓕ
IC4381	B-1	Ⓕ
IC4382	C-1	Ⓕ
IC4383	C-1	Ⓕ
IC4384	C-2	Ⓒ
IC4385	B-2	Ⓒ
IC4386	C-2	Ⓕ
IC4388	B-1	Ⓒ
IC4389	D-2	
IC4390	D-2	
IC4391	D-3	Ⓒ
IC4392	C-3	Ⓒ
IC4461	D-1	Ⓕ
IC4462	D-1	Ⓒ
IC4463	D-1	Ⓒ
IC4464	D-1	Ⓒ
IC4465	D-2	Ⓒ
IC4466	D-2	Ⓕ
IC4501	A-2	
IC4551	F-4	Ⓕ
IC4552	G-4	Ⓕ
IC4553	F-4	Ⓒ
IC4554	G-4	Ⓒ
IC4555	E-4	Ⓕ
IC4556	F-4	Ⓕ
IC4557	E-4	Ⓒ
IC4558	D-4	Ⓒ

Test Points

Ref.	Address
TG4121	I-2
TG4122	H-2
TG4191	G-1
TG4192	E-1
TG4461	D-1
TG4501	A-3
TP4121	I-2
TP4122	H-2
TP4123	I-1
TP4124	J-1
TP4125	J-2
TP4126	J-2
TP4191	F-1
TP4192	G-1
TP4193	E-2
TP4221	G-2
TP4281	F-2
TP4381	C-1
TP4382	C-3
TP4383	C-3
TP4501	A-3
TP4502	B-3

Adjustments

Ref.	Address
VR4002	I-3
VR4062	H-3
VR4221	G-2
VR4281	F-2
VR4341	E-2
VR4381	B-1
VR4382	B-2
VR4383	C-3
VR4384	C-3
VR4385	B-2
VR4501	A-1

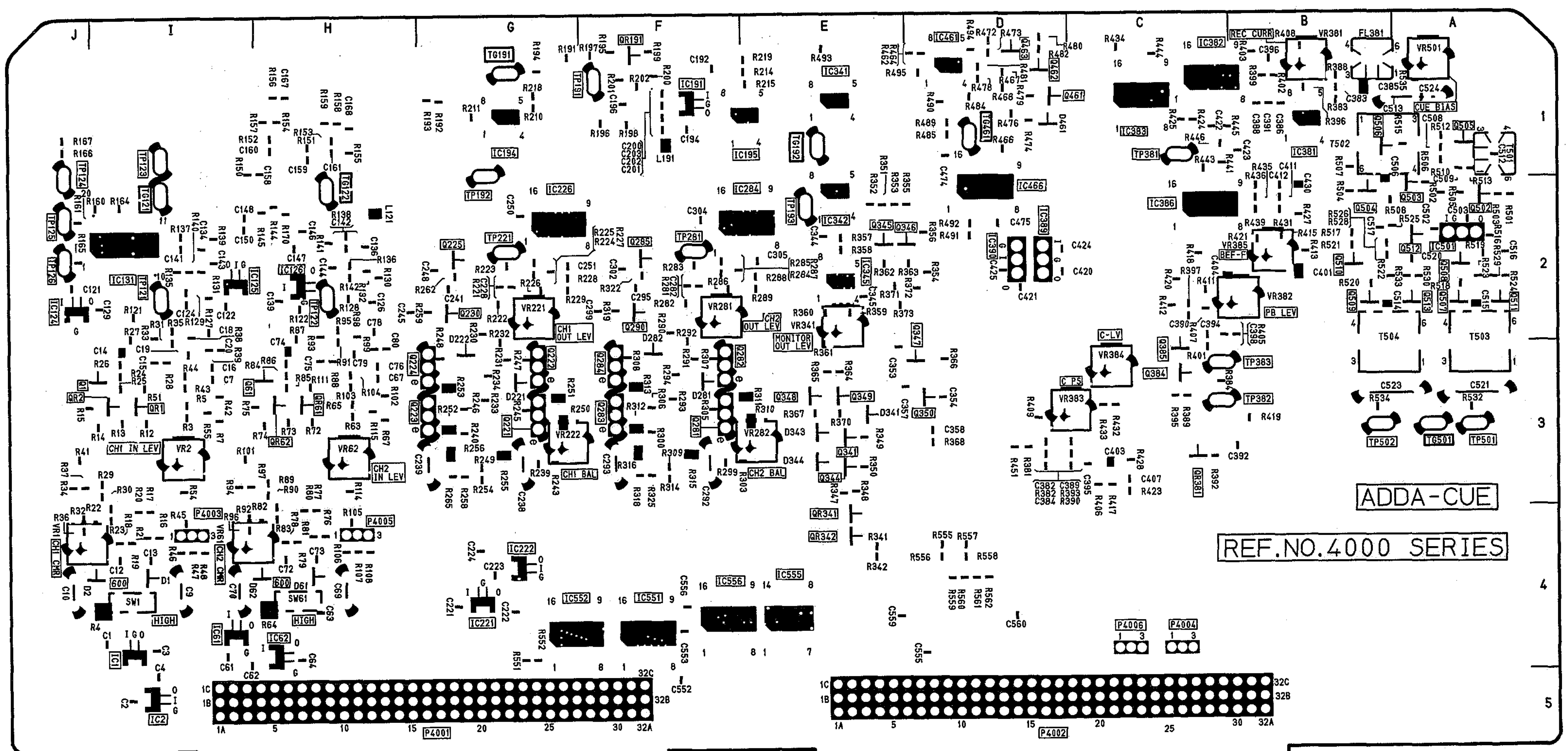
Switches

Ref.	Address	Side
SW4001	I-4	
SW4061	H-4	
SW4381	B-1	Ⓒ
SW4382	C-1	Ⓒ

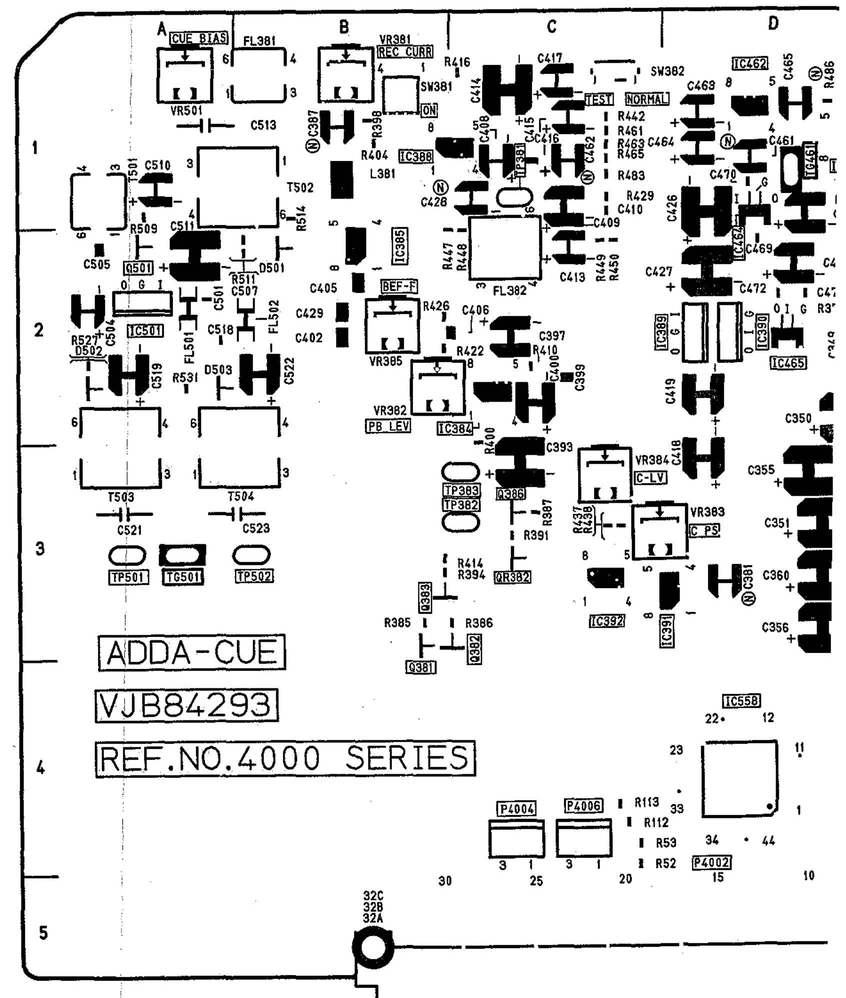
Connectors

Ref.	Address
P4001	G-5
P4002	D-5

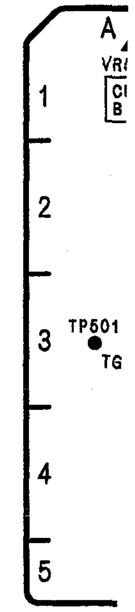
ADDRESS INFORMATION
Ⓒ ... COMPONENT SIDE
Ⓕ ... FOIL SIDE



(FOIL SIDE)



(COMPONENT SIDE)

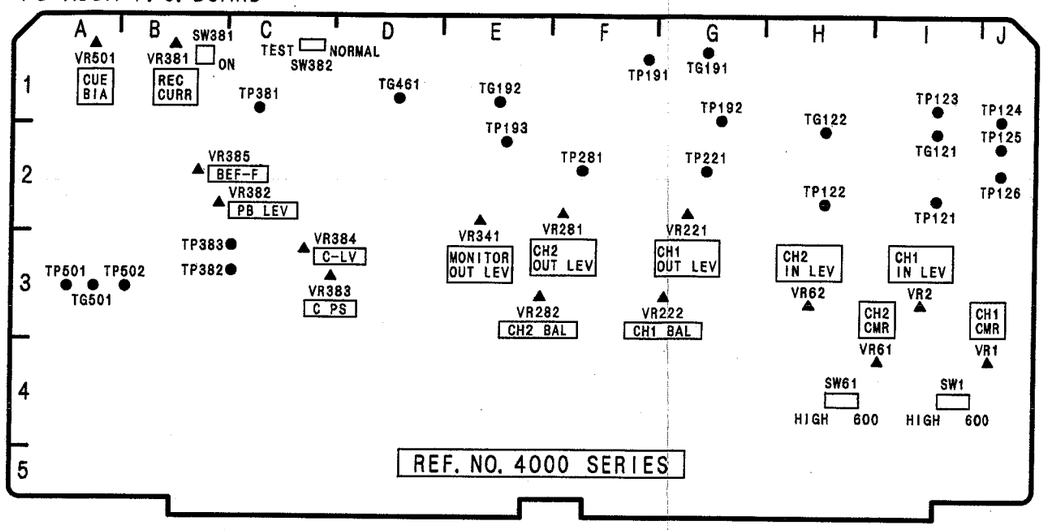


40P / VEP84293B: AJ-D650E/D640E)

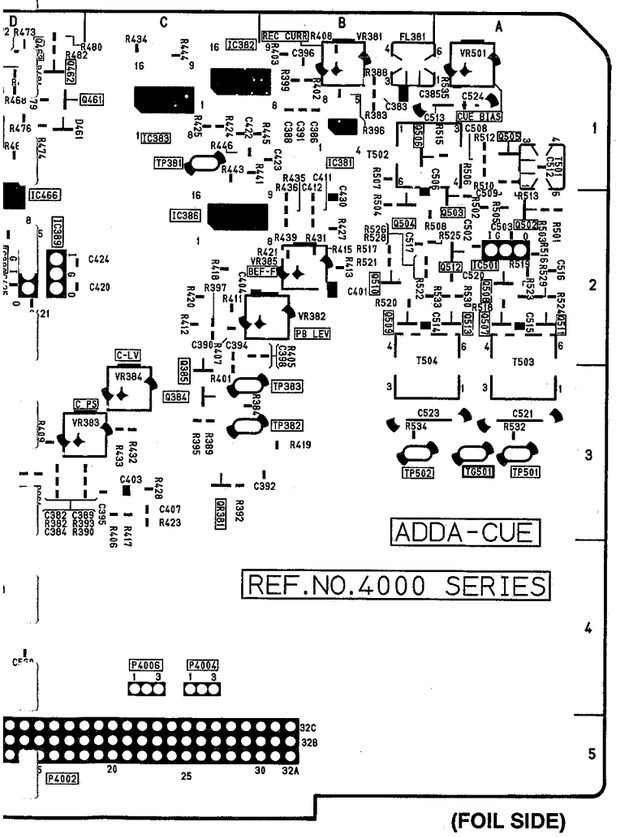
F8 ADDA

	J-3	Ⓒ	IC4194	G-1	Ⓕ	IC4386	C-2	Ⓕ	Test Points		TP4502	B-3	Connectors	
	I-3	Ⓒ	IC4195	E-1	Ⓕ	IC4388	B-1	Ⓒ	TG4121	I-2	Adjustments		P4001	G-5
	I-4	Ⓕ	IC4221	G-4	Ⓕ	IC4389	D-2		TG4122	H-2	VR4002	I-3	P4002	D-5
	H-4	Ⓕ	IC4222	G-4	Ⓕ	IC4390	D-2		TG4191	G-1	VR4062	H-3		
	H-3	Ⓒ	IC4223	G-2	Ⓒ	IC4391	D-3	Ⓒ	TG4192	E-1	VR4221	G-2		
	H-4	Ⓒ	IC4224	G-2	Ⓒ	IC4392	C-3	Ⓒ	TG4461	D-1	VR4281	F-2		
	H-3	Ⓒ	IC4225	G-3	Ⓒ	IC4461	D-1	Ⓕ	TG4501	A-3	VR4341	E-2		
	I-3	Ⓒ	IC4226	G-2	Ⓕ	IC4462	D-1	Ⓒ	TP4121	I-2	VR4381	B-1		
	H-3	Ⓒ	IC4281	F-2	Ⓒ	IC4463	D-1	Ⓒ	TP4122	H-2	VR4382	B-2		
	I-2	Ⓒ	IC4282	E-2	Ⓒ	IC4464	D-1	Ⓒ	TP4123	I-1	VR4383	C-3		
	H-2	Ⓒ	IC4283	F-3	Ⓒ	IC4465	D-2	Ⓒ	TP4124	J-1	VR4384	C-3		
	I-1	Ⓒ	IC4284	E-2	Ⓕ	IC4466	D-2	Ⓕ	TP4125	J-2	VR4385	B-2		
	J-2	Ⓕ	IC4341	E-1	Ⓕ	IC4501	A-2		TP4126	J-2	VR4501	A-1		
	I-2	Ⓕ	IC4342	E-2	Ⓕ	IC4551	F-4	Ⓕ	TP4191	F-1	Switches			
	H-2	Ⓕ	IC4343	E-2	Ⓒ	IC4552	G-4	Ⓕ	TP4192	G-1	SW4001	I-4		
	I-2	Ⓒ	IC4344	E-1	Ⓒ	IC4553	F-4	Ⓒ	TP4193	E-2	SW4061	H-4		
	H-2	Ⓒ	IC4345	E-2	Ⓕ	IC4554	G-4	Ⓒ	TP4221	G-2	SW4381	B-1	Ⓒ	
	H-1	Ⓒ	IC4381	B-1	Ⓕ	IC4555	E-4	Ⓕ	TP4281	F-2	SW4382	C-1	Ⓒ	
	I-2	Ⓕ	IC4382	C-1	Ⓕ	IC4556	F-4	Ⓕ	TP4381	C-1				
	F-1	Ⓕ	IC4383	C-1	Ⓕ	IC4557	E-4	Ⓒ	TP4382	C-3				
	G-1	Ⓒ	IC4384	C-2	Ⓒ	IC4558	D-4	Ⓒ	TP4383	C-3				
	F-1	Ⓒ	IC4385	B-2	Ⓒ				TP4501	A-3				

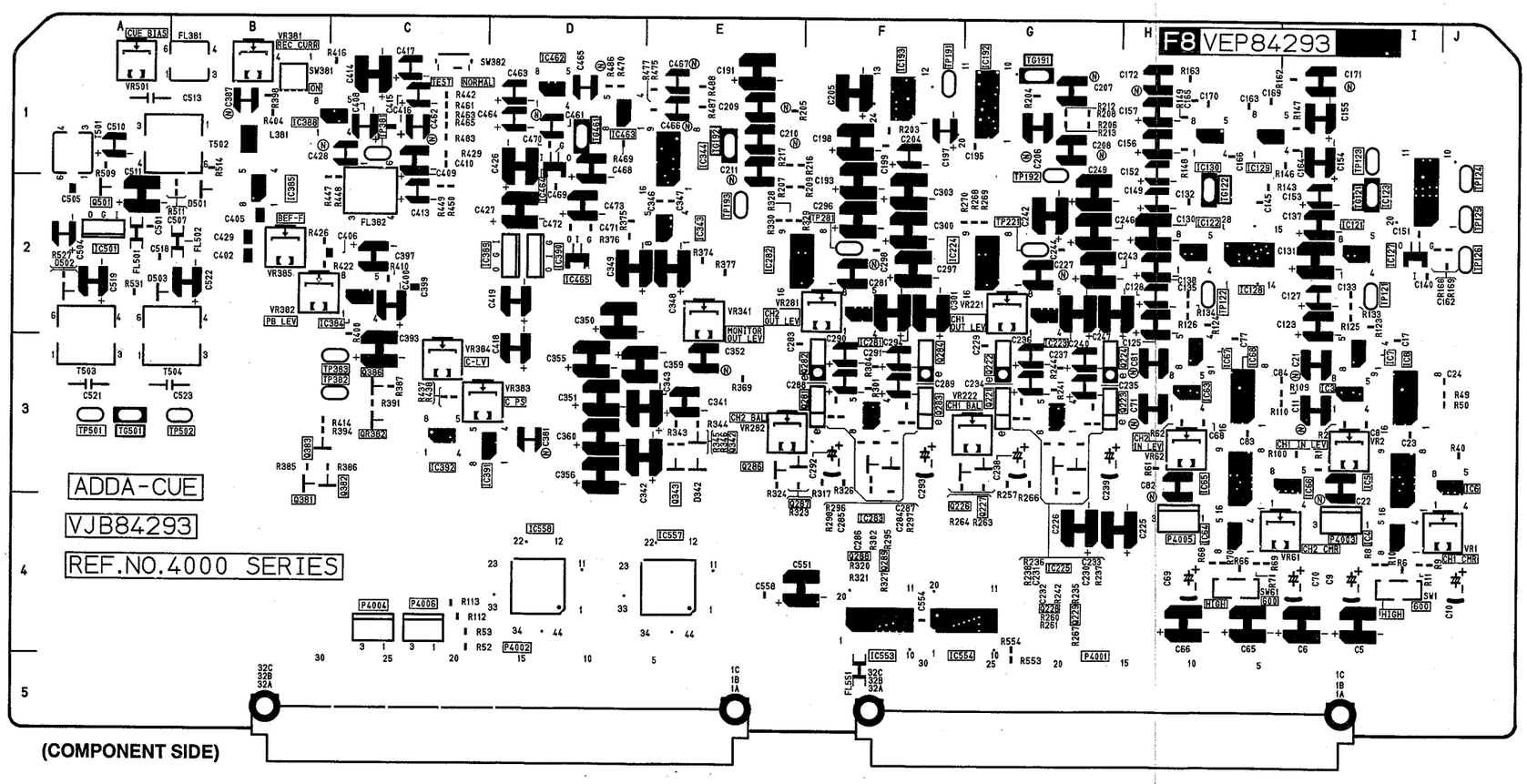
F8 ADDA P. C. BOARD



(COMPONENT SIDE)



(FOIL SIDE)



(COMPONENT SIDE)

H3 EQ P.C. BOARD (VEP85048A)

H3 EQ

Transistors		
Q5001	A-4	Ⓒ
Q5002	B-4	Ⓕ
Q5003	B-4	Ⓒ
Q5004	A-4	Ⓕ
Q5005	A-4	Ⓕ
Q5006	B-3	Ⓕ
Q5007	B-4	Ⓕ
Q5008	A-3	Ⓕ
Q5009	B-3	Ⓕ
Q5010	B-3	Ⓕ
Q5011	A-3	Ⓒ
Q5012	D-1	Ⓕ
Q5101	A-3	Ⓒ
Q5102	A-3	Ⓕ
Q5103	B-3	Ⓒ
Q5104	A-3	Ⓕ
Q5105	B-2	Ⓕ
Q5106	B-3	Ⓕ
Q5107	B-2	Ⓒ
Q5108	B-2	Ⓕ
Q5109	A-2	Ⓒ
Q5110	A-2	Ⓕ
Q5110	A-2	Ⓕ
Q5201	D-2	Ⓕ
Q5203	D-2	Ⓕ
Q5204	E-2	Ⓕ
Q5401	C-1	Ⓕ
Q5402	C-1	Ⓕ
Q5403	C-1	Ⓕ
Q5404	D-1	Ⓕ
Q5601	B-2	Ⓕ
Q5602	B-2	Ⓕ
Q5603	B-2	Ⓒ
Q5606	C-2	Ⓕ
Q5607	C-2	Ⓕ
Q5608	B-3	Ⓕ

Transistor-Resistors		
QR5101	B-2	Ⓕ
QR5401	B-5	Ⓕ
QR5402	B-5	Ⓕ

Integrated Circuits		
IC5001	E-1	Ⓒ
IC5101	B-2	Ⓒ
IC5102	B-1	Ⓒ
IC5201	D-5	Ⓕ
IC5202	D-1	Ⓕ
IC5203	E-3	Ⓕ
IC5204	E-1	Ⓕ
IC5205	D-5	Ⓒ
IC5206	C-3	Ⓕ
IC5207	D-3	Ⓒ
IC5208	D-2	Ⓒ
IC5209	D-2	Ⓒ
IC5210	E-3	Ⓒ
IC5401	B-4	Ⓕ
IC5402	B-5	Ⓕ
IC5403	B-5	Ⓕ
IC5404	B-1	Ⓕ
IC5405	B-1	Ⓒ
IC5406	B-2	Ⓒ
IC5407	C-1	Ⓕ
IC5408	C-2	Ⓒ
IC5409	C-1	Ⓒ
IC5410	C-1	Ⓒ
IC5411	C-2	Ⓒ
IC5601	B-2	Ⓒ
IC5602	B-3	Ⓒ
IC5603	C-3	Ⓒ
IC5701	D-2	Ⓒ
IC5702	C-2	Ⓒ
IC5703	C-3	Ⓒ
IC5704	C-3	Ⓕ
IC5801	E-4	Ⓕ
IC5802	C-3	Ⓕ
IC5803	D-4	Ⓕ
IC5805	D-4	Ⓒ
IC5806	D-4	Ⓒ
IC5807	C-4	Ⓒ
IC5808	C-4	Ⓒ
IC5809	C-4	Ⓒ
IC5810	B-4	Ⓕ
IC5811	C-5	Ⓕ
IC5901	C-3	Ⓒ
IC5902	B-4	Ⓕ
IC5903	C-4	Ⓕ
IC5904	D-4	Ⓕ
IC5951	B-3	Ⓕ
IC5952	B-3	Ⓒ
IC5953	A-1	Ⓕ
IC5954	A-4	Ⓕ
IC5955	E-2	
IC5956	A-2	
IC5957	E-3	
IC5958	A-3	
IC5959	A-3	Ⓕ

Test Points		
TP1	B-3	
TP2	D-2	
TP101	A-2	
TP102	B-2	
TP201	D-3	
TP202	D-2	
TP203	E-2	
TP204	D-3	
TP401	D-1	
TP402	C-1	
TP403	C-1	
TP404	B-2	
TP405	D-1	
TP601	C-3	
TP602	C-3	
TP801	D-3	Ⓒ
TP802	E-4	Ⓒ
TP901	C-3	
TG5101	A-2	
TG5201	C-2	
TG5401	D-1	
TG5801	D-3	

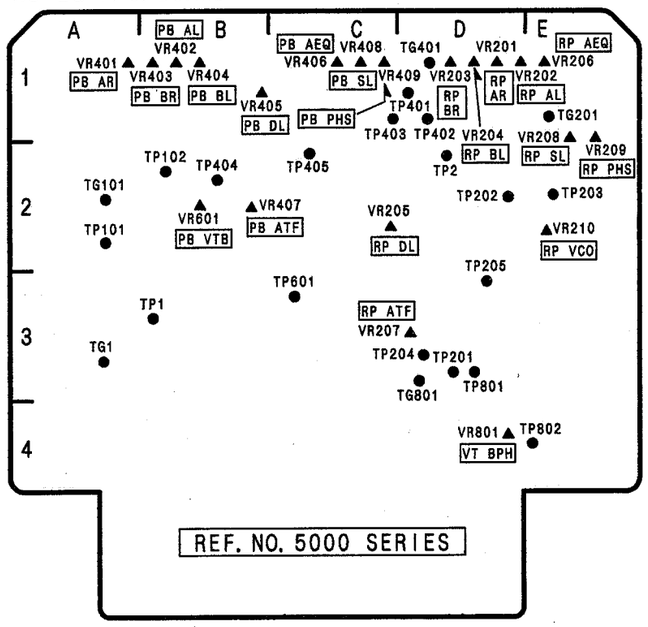
Adjustments		
VR201	D-1	Ⓒ
VR202	E-1	Ⓒ
VR203	D-1	Ⓒ
VR204	D-1	Ⓒ
VR206	E-1	Ⓒ
VR207	D-3	Ⓒ
VR208	E-1	Ⓒ
VR209	E-1	Ⓒ
VR5210	E-2	
VR5401	A-1	Ⓒ
VR5402	B-1	Ⓒ
VR5403	B-1	Ⓒ
VR5404	B-1	Ⓒ
VR5406	C-1	Ⓒ
VR5407	B-2	Ⓒ
VR5408	C-1	Ⓒ
VR5409	C-1	Ⓒ
VR5410	D-1	Ⓒ
VR5410	D-1	
VR5411	C-2	Ⓒ
VR5601	B-2	
VR5801	D-4	Ⓒ

Switch		
SW5801	D-3	Ⓒ

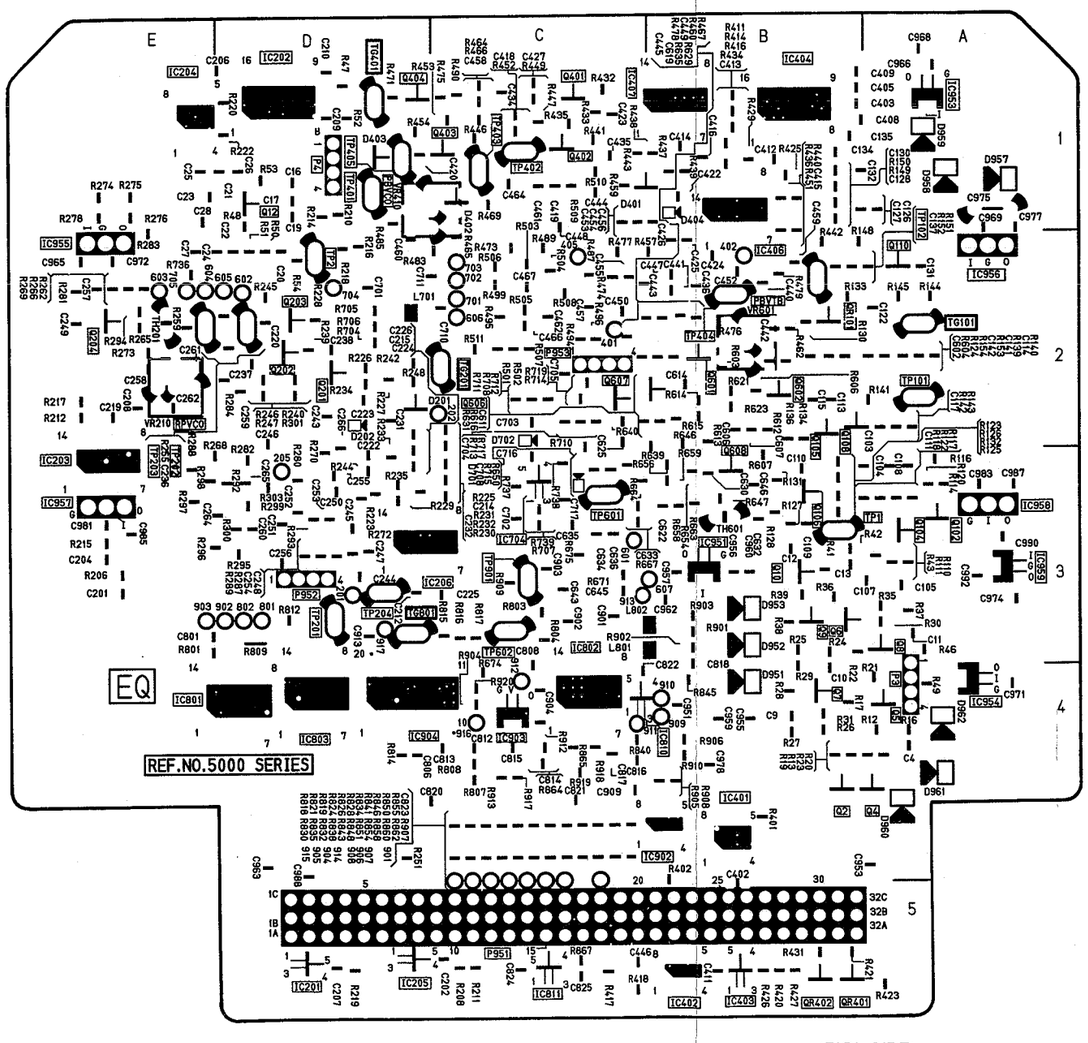
Connectors	
P5003	A-4
P5004	D-1
P5951	C-5
P5952	D-3
P5953	C-2

ADDRESS INFORMATION
Ⓒ... COMPONENT SIDE
Ⓕ... FOIL SIDE

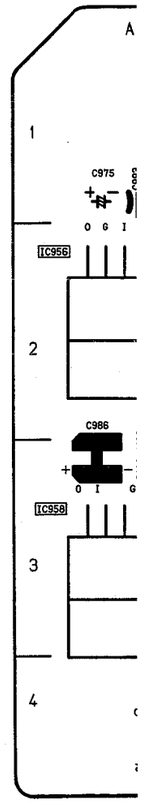
H3 EQ P. C. BOARD



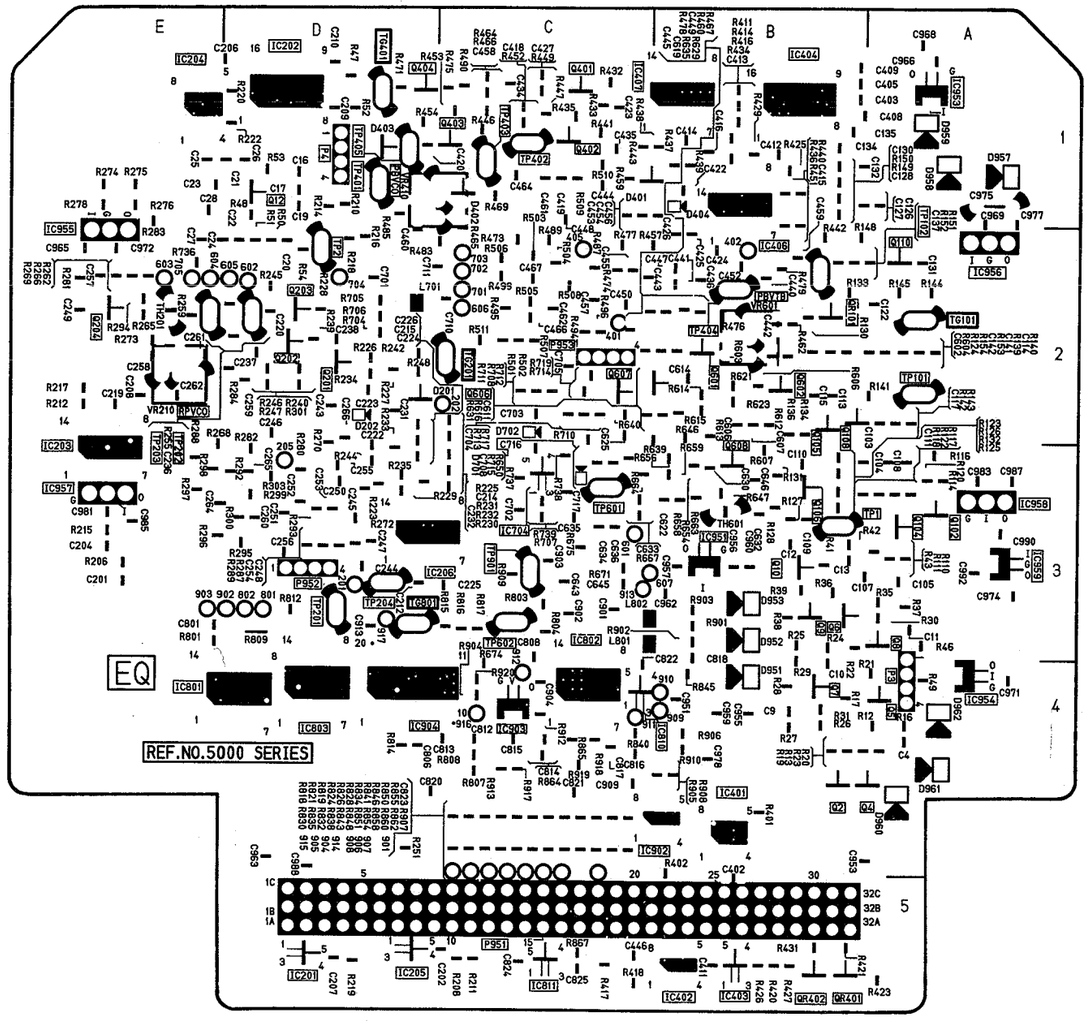
(COMPONENT SIDE)



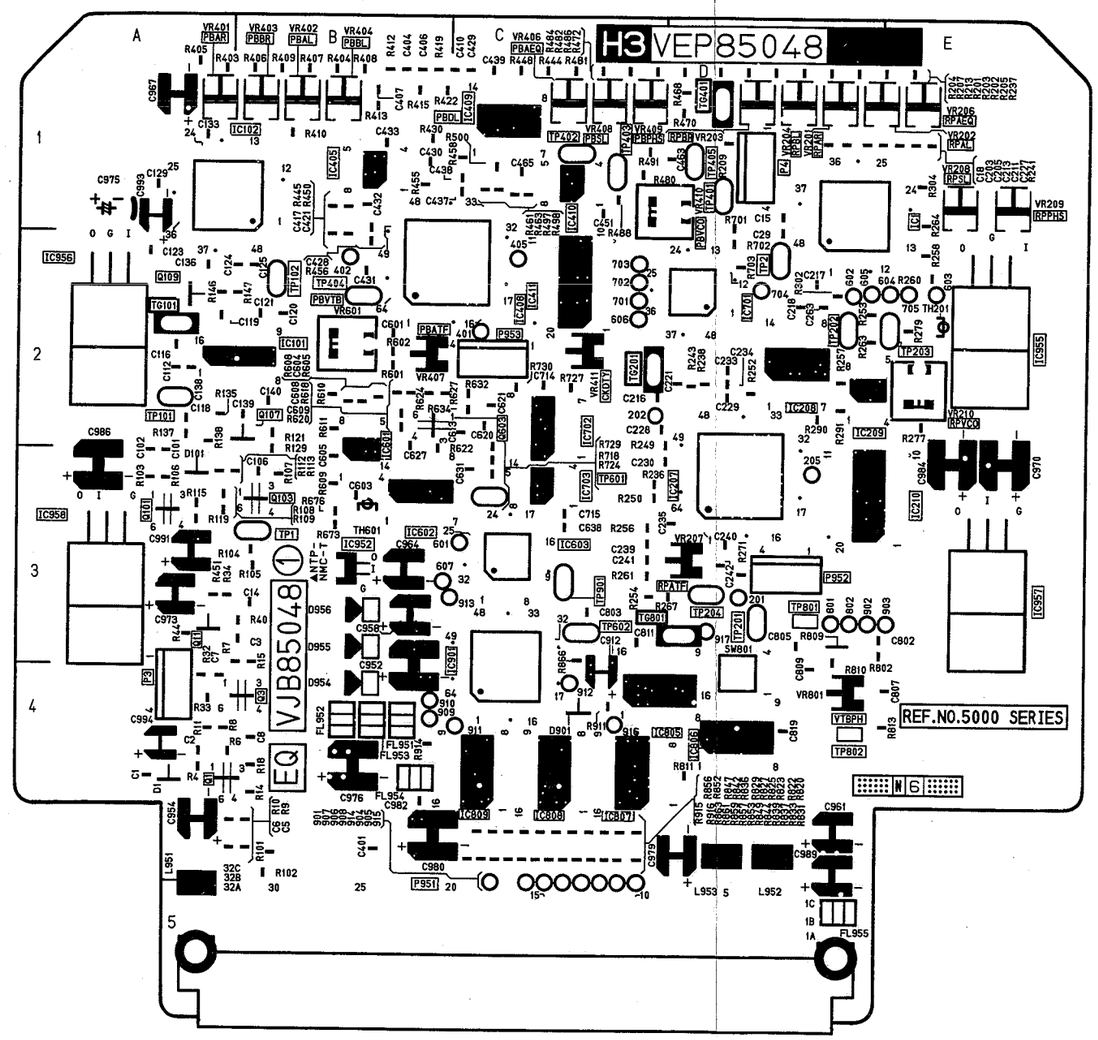
(FIOL SIDE)



H3 EQ P.C. BOARD (VEP85048A)

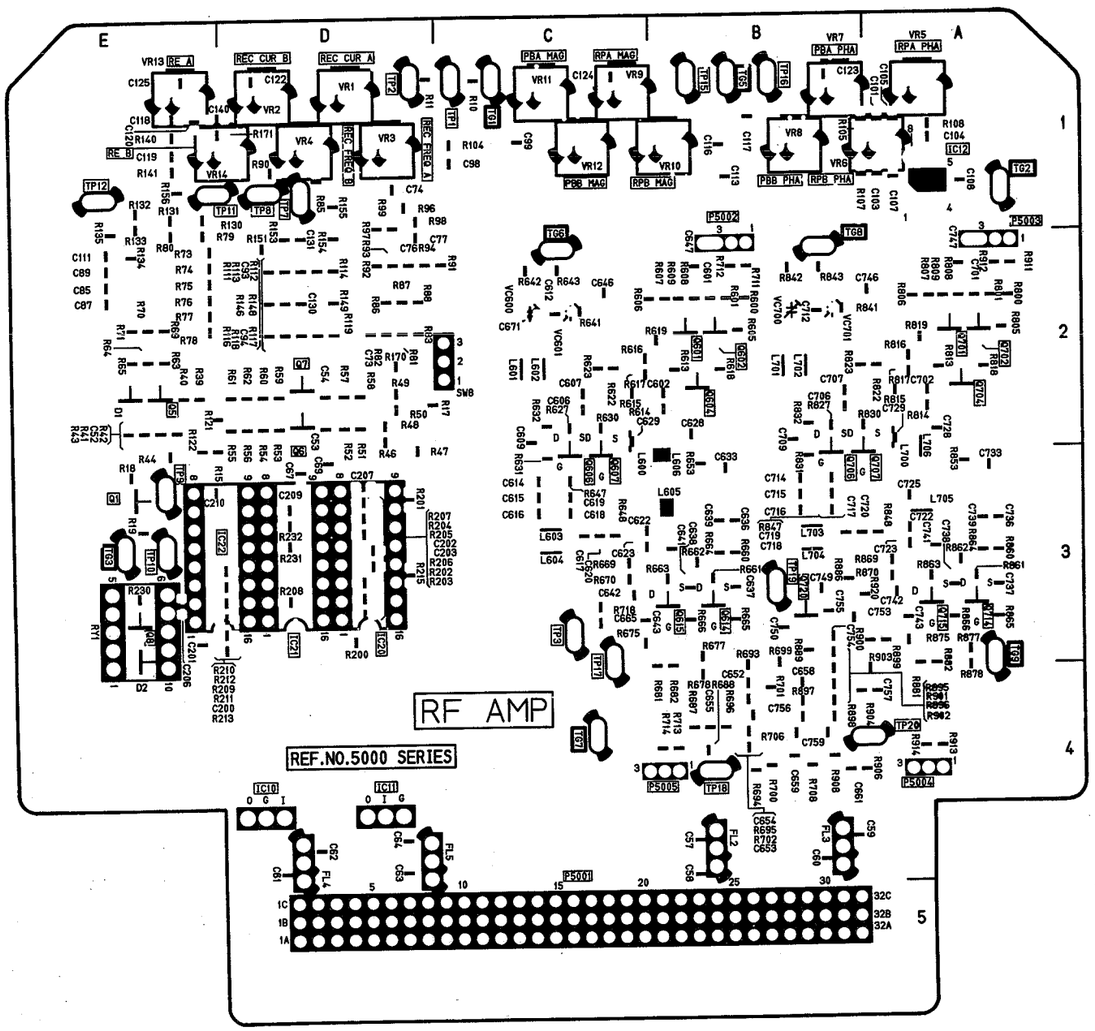


(FIOL SIDE)

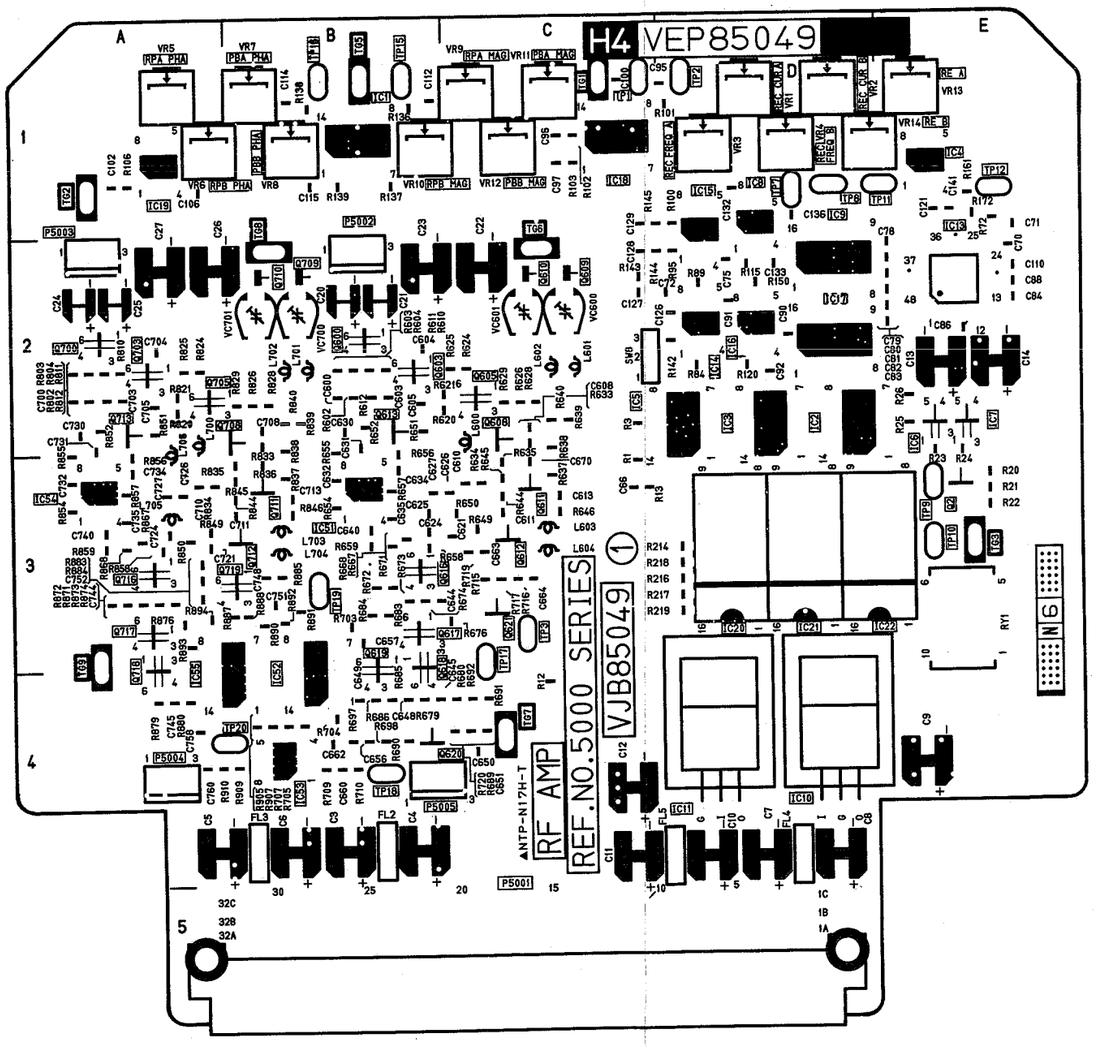


(COMPONENT SIDE)

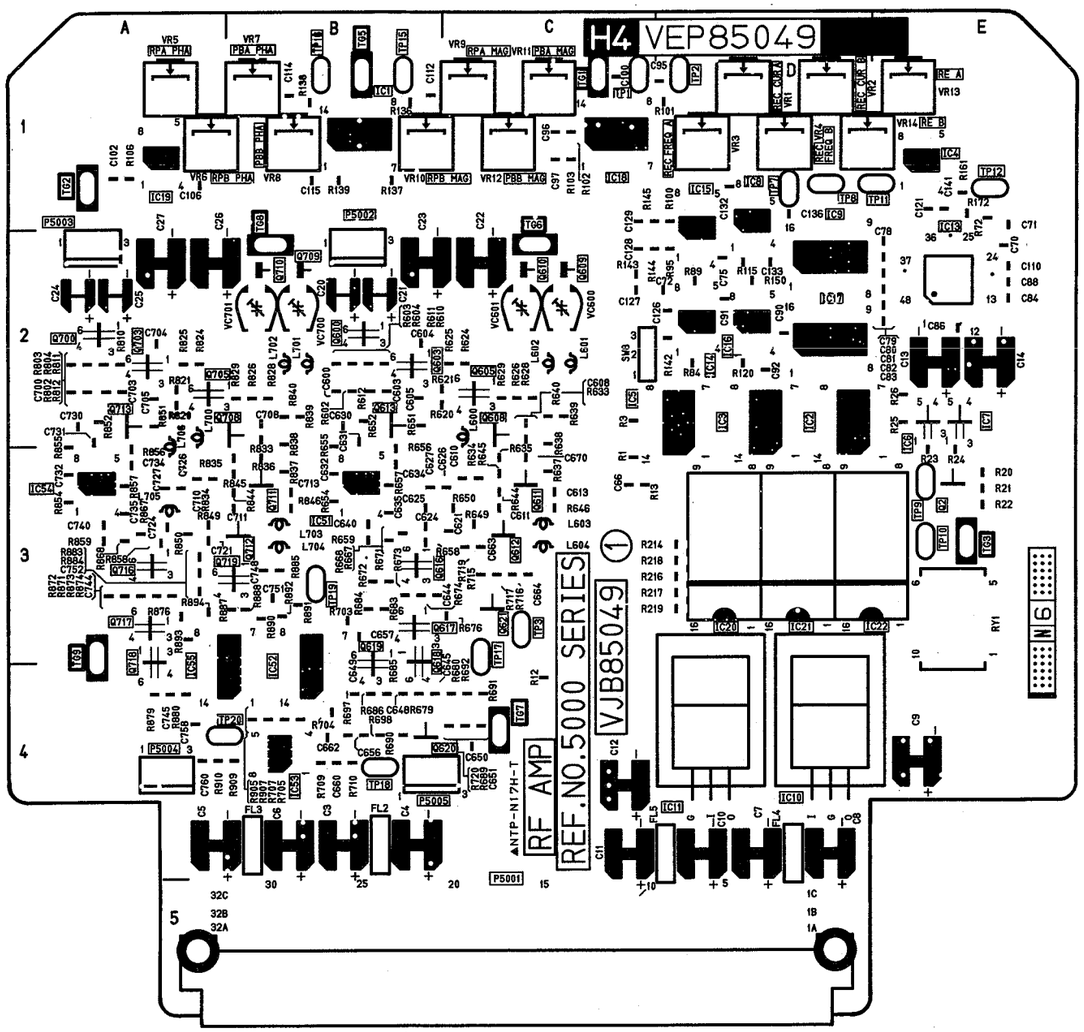
H4 RF AMP P.C. BOARD (VEP85049A)



(FOIL SIDE)



(COMPONENT SIDE)

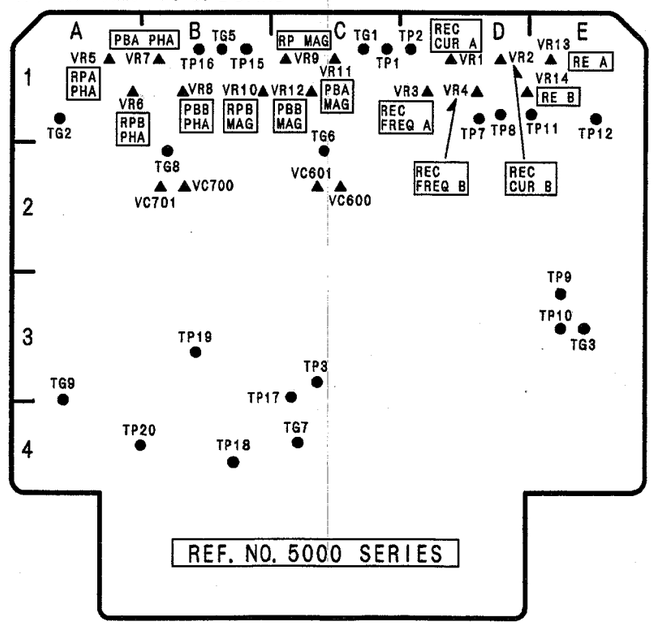


(COMPONENT SIDE)

H4 RF AMP							
Transistors		Q5704	A-2 Ⓕ	IC5016	D-2 Ⓒ	TG5007	C-4
Q5001	E-3 Ⓕ	Q5705	A-2 Ⓒ	IC5017	D-2 Ⓒ	TG5008	B-2
Q5002	E-3 Ⓒ	Q5706	B-3 Ⓕ	IC5018	C-1 Ⓒ	TG5009	A-3
Q5005	E-2 Ⓕ	Q5707	A-3 Ⓕ	IC5019	A-1 Ⓒ	**Adjustments**	
Q5006	D-2 Ⓕ	Q5708	B-2 Ⓒ	IC5020	D-3	VC5600	C-2 Ⓒ
Q5007	D-2 Ⓕ	Q5709	B-2 Ⓒ	IC5021	D-3	VC5601	C-2 Ⓒ
Q5008	E-3 Ⓕ	Q5710	B-2 Ⓒ	IC5022	E-3	VC5700	B-2
Q5600	B-2 Ⓒ	Q5711	B-3 Ⓒ	IC5051	B-3 Ⓒ	VC5701	B-2 Ⓒ
Q5601	B-2 Ⓒ	Q5712	B-3 Ⓒ	IC5052	B-4 Ⓒ	VR5001	D-1
Q5602	B-2 Ⓒ	Q5713	A-2 Ⓒ	IC5053	B-4 Ⓒ	VR5002	D-1
Q5603	B-2 Ⓒ	Q5714	A-3 Ⓕ	IC5054	A-3 Ⓒ	VR5003	D-1
Q5604	B-2 Ⓒ	Q5715	A-3 Ⓕ	IC5055	A-4 Ⓒ	VR5004	D-1
Q5605	C-2 Ⓒ	Q5716	A-3 Ⓒ	**Test Points**		VR5005	A-1
Q5606	C-3 Ⓕ	Q5717	A-3 Ⓒ	TP1	C-1	VR5006	A-1
Q5607	C-3 Ⓕ	Q5718	A-3 Ⓒ	TP2	D-1	VR5007	B-1
Q5608	C-2 Ⓒ	Q5719	B-3 Ⓒ	TP3	C-3	VR5008	B-1
Q5609	C-2 Ⓒ	Q5720	B-3 Ⓒ	TP7	D-1	VR5009	C-1
Q5610	C-2 Ⓒ	**Integrated Circuits**		TP8	D-1	VR5010	B-1
Q5611	C-3 Ⓒ	IC5001	B-1 Ⓒ	TP9	E-3	VR5011	C-1
Q5612	C-3 Ⓒ	IC5002	D-2 Ⓒ	TP10	E-3	VR5012	C-1
Q5613	B-2 Ⓒ	IC5003	D-2 Ⓒ	TP11	D-1	VR5013	E-1
Q5614	B-3 Ⓕ	IC5004	E-1 Ⓒ	TP12	E-1	VR5014	E-1
Q5615	B-3 Ⓕ	IC5005	C-2 Ⓒ	TP15	B-1	**Switch**	
Q5616	B-3 Ⓒ	IC5006	E-2 Ⓒ	TP16	B-1	SW5008	C-2
Q5617	C-3 Ⓒ	IC5007	E-2 Ⓒ	TP17	C-3	**Connectors**	
Q5618	B-3 Ⓒ	IC5008	D-1 Ⓒ	TP18	B-4	P5001	C-4
Q5619	B-3 Ⓒ	IC5009	D-1 Ⓒ	TP19	B-3	P5002	B-1
Q5620	B-4 Ⓒ	IC5010	D-4	TP20	A-4	P5003	A-1
Q5621	C-3 Ⓒ	IC5011	D-4	TG5001	C-1	P5004	A-4
Q5700	A-2 Ⓒ	IC5012	A-1 Ⓕ	TG5002	A-1	P5005	B-4
Q5701	A-2 Ⓕ	IC5013	E-1 Ⓒ	TG5003	E-3		
Q5702	A-2 Ⓕ	IC5014	D-2 Ⓒ	TG5005	B-1		
Q5703	A-2 Ⓒ	IC5015	D-1 Ⓒ	TG5006	C-1		

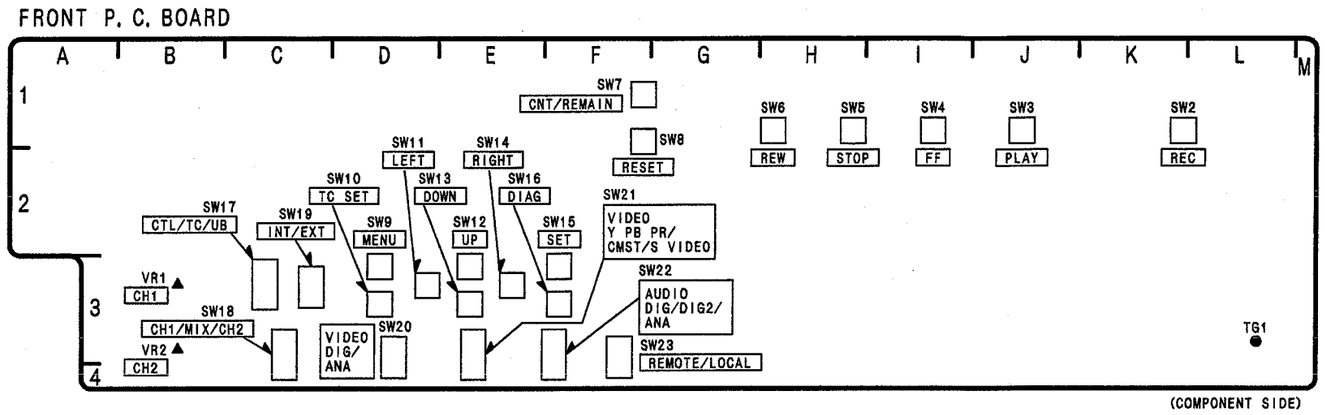
ADDRESS INFORMATION
Ⓒ... COMPONENT SIDE
Ⓕ... FOIL SIDE

H4 RF AMP P. C. BOARD



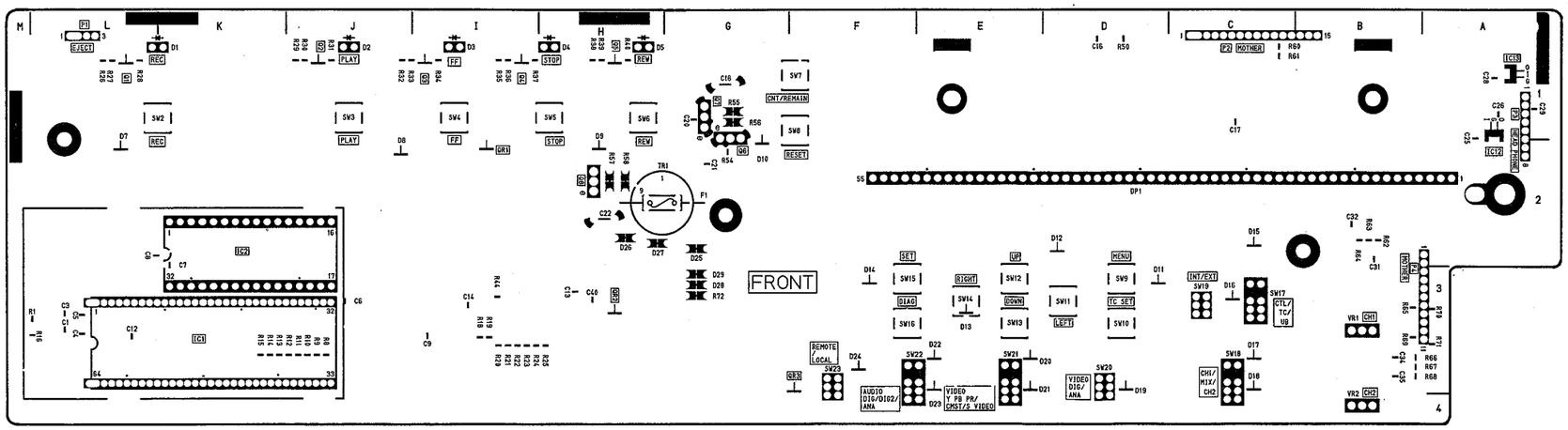
(COMPONENT SIDE)

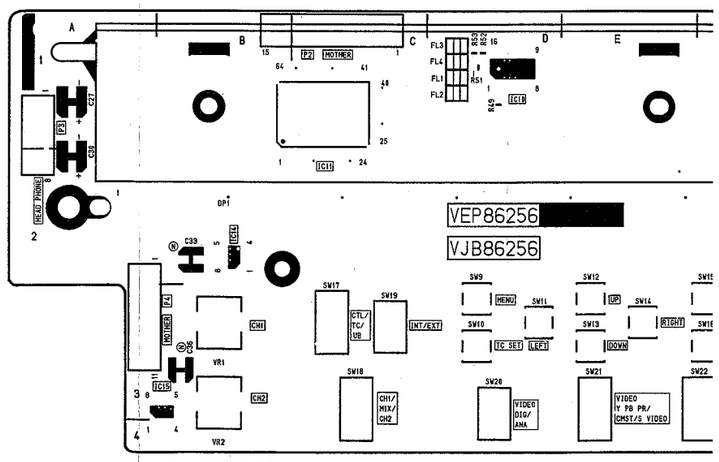
FRONT P.C. BOARD (VEP86256A)



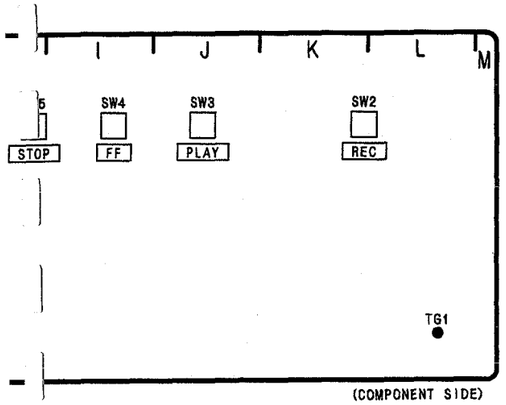
FRONT		
Transistors		
Q1	L-1	Ⓕ
Q2	J-1	Ⓕ
Q3	I-1	Ⓕ
Q4	I-1	Ⓕ
Q5	H-1	Ⓕ
Q6	G-1	
Q7	G-1	
Q8	H-2	
Transistor-Resistors		
QR1	I-2	Ⓕ
QR2	H-3	Ⓕ
QR3	F-3	Ⓕ
Integrated Circuits		
IC1	K-3	
IC2	K-2	
IC2		
IC3	L-2	Ⓒ
IC4	L-3	Ⓒ
IC5	J-3	Ⓒ
IC6	I-3	Ⓒ
IC7	J-3	Ⓒ
IC8	H-3	Ⓒ
IC9	I-3	Ⓒ
IC10	D-1	Ⓒ
IC11	C-1	Ⓒ
IC12	A-1	Ⓕ
IC13	A-1	Ⓕ
IC14	B-2	Ⓒ
IC15	B-3	Ⓒ
Test Point		
TG1	L-3	Ⓒ
Adjustments		
VR1	B-3	
VR2	B-4	
Switches		
SW2	K-1	
SW3	J-1	
SW4	I-1	
SW5	H-1	
SW6	H-1	
SW7	F-1	
SW8	F-1	
SW9	D-3	
SW10	D-3	
SW11	D-3	
SW12	E-3	
SW13	E-3	
SW14	E-3	
SW15	F-3	
SW16	F-3	
SW17	C-2	
SW18	C-3	
SW19	C-3	
SW20	D-3	
SW21	E-3	
SW22	F-3	
SW23	F-3	
Connectors		
P1	L-1	
P2	C-1	
P3	A-1	
P4	A-3	

ADDRESS INFORMATION
Ⓒ ... COMPONENT SIDE
Ⓕ ... FOIL SIDE



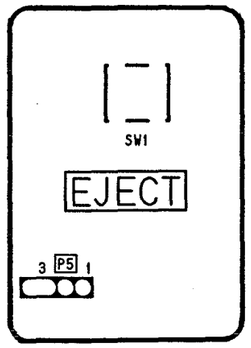


EJECT P.C. BOARD (VEP80A09A)

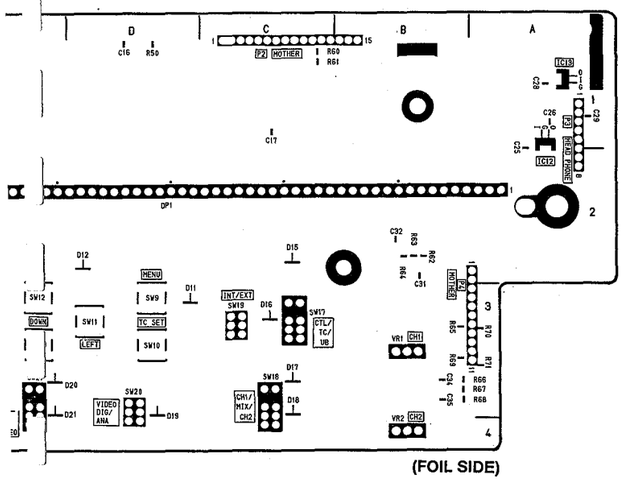


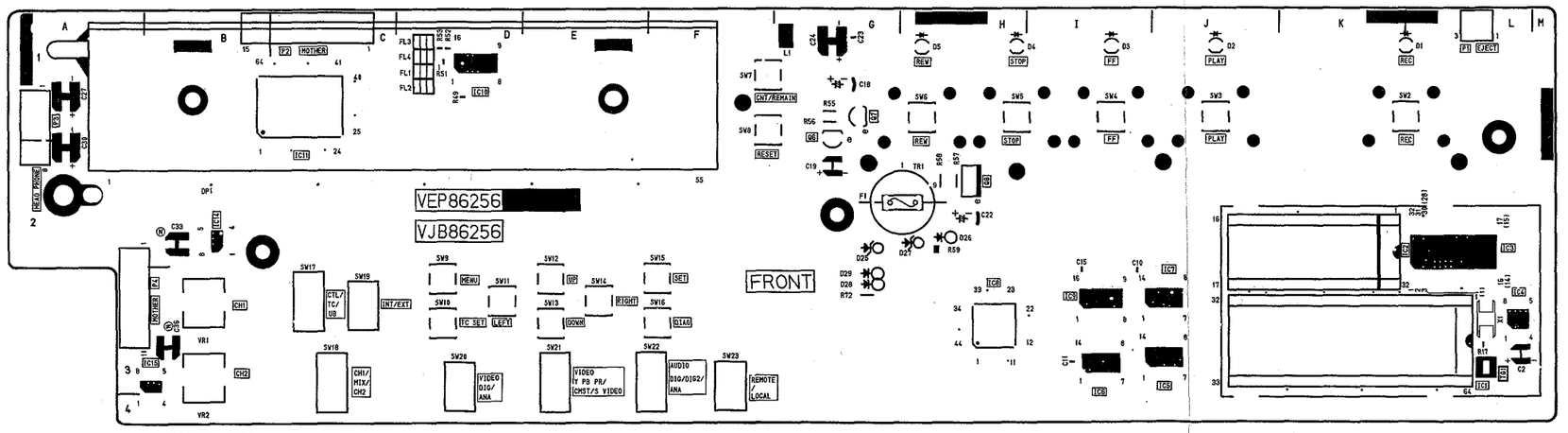
FRONT				
Transistors			**Adjustments**	
Q1	L-1	Ⓕ	VR1	B-3
Q2	J-1	Ⓕ	VR2	B-4
Q3	I-1	Ⓕ	**Switches**	
Q4	I-1	Ⓕ	SW2	K-1
Q5	H-1	Ⓕ	SW3	J-1
Q6	G-1		SW4	I-1
Q7	G-1		SW5	H-1
Q8	H-2		SW6	H-1
Transistor-Resistors			SW7	F-1
QR1	I-2	Ⓕ	SW8	F-1
QR2	H-3	Ⓕ	SW9	D-3
QR3	F-3	Ⓕ	SW10	D-3
Integrated Circuits			SW11	D-3
IC1	K-3		SW12	E-3
IC2	K-2		SW13	E-3
IC2			SW14	E-3
IC3	L-2	Ⓒ	SW15	F-3
IC4	L-3	Ⓒ	SW16	F-3
IC5	J-3	Ⓒ	SW17	C-2
IC6	I-3	Ⓒ	SW18	C-3
IC7	J-3	Ⓒ	SW19	C-3
IC8	H-3	Ⓒ	SW20	D-3
IC9	I-3	Ⓒ	SW21	E-3
IC10	D-1	Ⓒ	SW22	F-3
IC11	C-1	Ⓒ	SW23	F-3
IC12	A-1	Ⓕ	**Connectors**	
IC13	A-1	Ⓕ	P1	L-1
IC14	B-2	Ⓒ	P2	C-1
IC15	B-3	Ⓒ	P3	A-1
Test Point			P4	A-3
TG1	L-3	Ⓒ		

ADDRESS INFORMATION
Ⓒ ... COMPONENT SIDE
Ⓕ ... FOIL SIDE

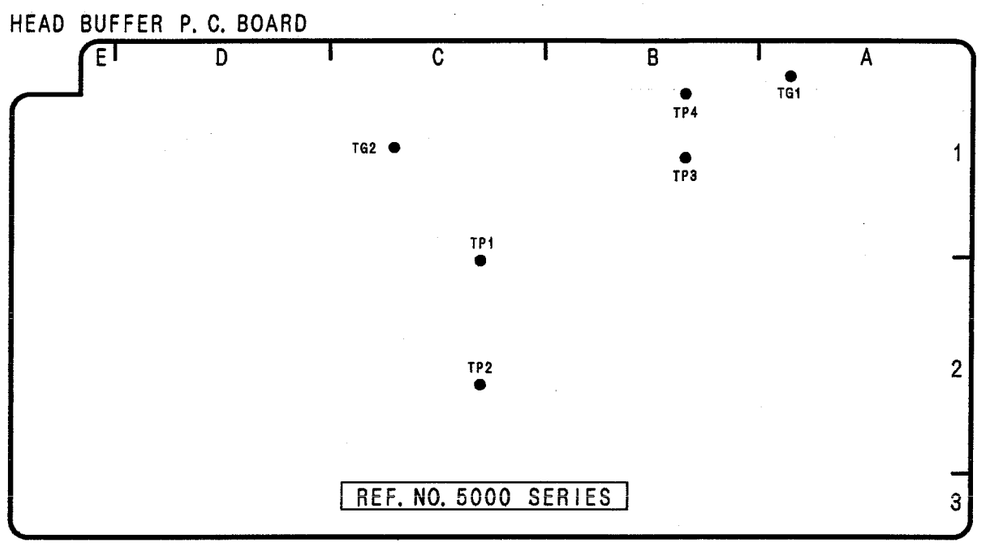


(FOIL SIDE)



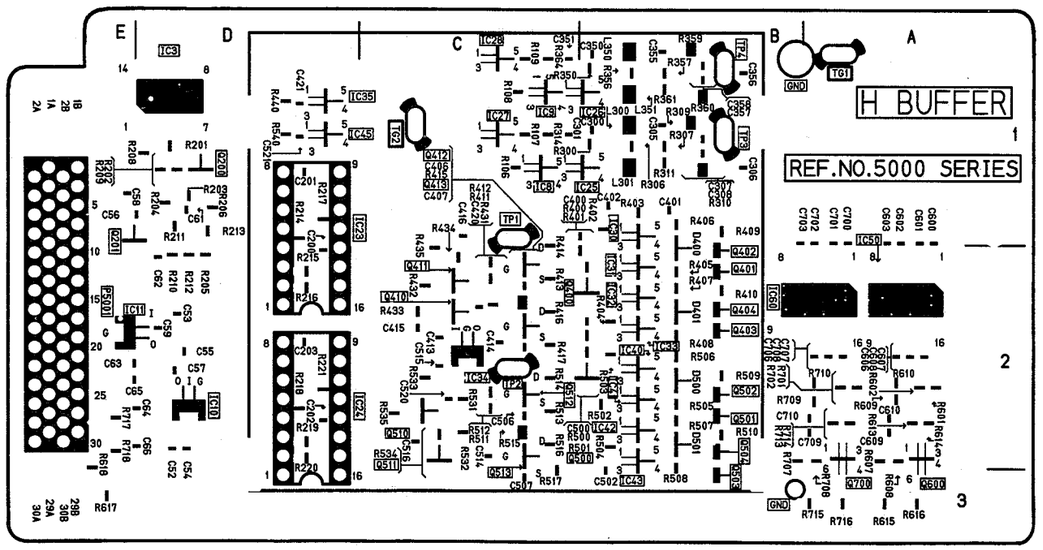


HEAD BUFFER P.C. BOARD (VEP85151A)

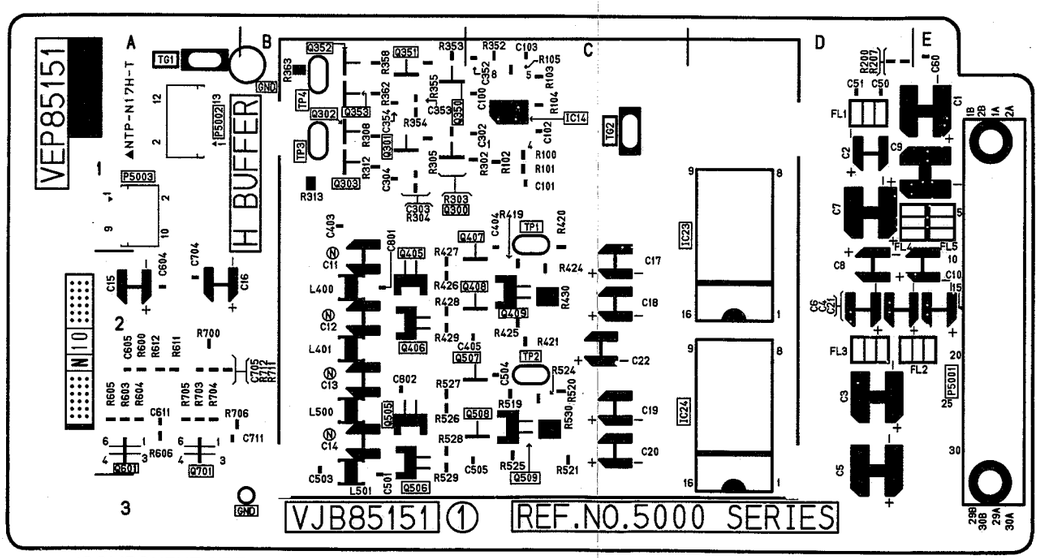


HEAD BUFFER			
Transistors		**Integrated Circuits**	
Q5200	D-1 (F)	IC5003	D-1 (F)
Q5201	E-1 (F)	IC5008	C-1 (F)
Q5300	B-1 (C)	IC5009	C-1 (F)
Q5301	B-1 (C)	IC5010	D-2 (F)
Q5302	B-1 (C)	IC5011	E-2 (F)
Q5303	B-1 (C)	IC5014	C-1 (C)
Q5350	B-1 (C)	IC5023	D-1
Q5351	B-1 (C)	IC5024	D-2
Q5352	B-1 (C)	IC5025	B-1 (F)
Q5353	B-1 (C)	IC5026	B-1 (F)
Q5400	C-2 (F)	IC5027	C-1 (F)
Q5401	B-2 (F)	IC5028	C-1 (F)
Q5402	B-2 (F)	IC5030	B-1 (F)
Q5403	B-2 (F)	IC5031	B-2 (F)
Q5404	B-2 (F)	IC5032	B-2 (F)
Q5405	B-2 (C)	IC5033	B-2 (F)
Q5406	B-2 (C)	IC5034	C-2 (F)
Q5407	C-1 (C)	IC5035	D-1 (F)
Q5408	C-2 (C)	IC5040	B-2 (F)
Q5409	C-2 (C)	IC5041	B-2 (F)
Q5410	C-2 (F)	IC5042	B-2 (F)
Q5411	C-2 (F)	IC5043	B-3 (F)
Q5412	C-1 (F)	IC5045	D-1 (F)
Q5413	C-1 (F)	IC5050	A-2 (F)
Q5500	C-2 (F)	IC5060	B-2 (F)
Q5501	B-2 (F)	**Test Points**	
Q5502	B-2 (F)	TP1	C-1
Q5503	B-3 (F)	TP2	C-2
Q5504	B-2 (F)	TP3	B-1
Q5505	B-2 (C)	TP4	B-1
Q5506	B-3 (C)	TG5001	A-1
Q5507	C-2 (C)	TG5002	C-1
Q5508	C-2 (C)	**Connectors**	
Q5509	C-2 (C)	P5001	E-2
Q5510	C-2 (F)	P5002	A-1 (C)
Q5511	C-2 (F)	P5003	A-1 (C)
Q5512	C-2 (F)		
Q5513	C-3 (F)		
Q5600	A-3 (F)		
Q5601	A-2 (C)		
Q5700	A-3 (F)		
Q5701	A-2 (C)		

ADDRESS INFORMATION
(C)... COMPONENT SIDE
(F)... FOIL SIDE



(FIOL SIDE)



(COMPONENT SIDE)

POWER 1 P.C. BOARD (VEP81074A: AJ-D650/D640/D650P/D640P / VEP81074B: AJ-D650E/D640E)

JAPAN ONLY

⚠ 警　告

感電注意

AC100V の加わっている活電部（充電部、活電部）に直接触れないでください。

☞ 感電ややけどの可能性があります。

① **⚠ 警　告** ⚠印の部品は安全上重要な部品です。交換するときは、安全および性能維持のため必ず指定の部品をご使用ください。

② ▭ 内は充電部です。AC 100V が加わっておりますので点検、修理のときは感電しないよう充分ご注意ください。

③ 部品交換時には、電源プラグをぬいてから行ってください。

④ 一次側（充電部）の電圧・波形は、一次側アースを基準に測定してください。

⑤ 部品品番は、部品価格表で確認の上交換ください。

CAUTION

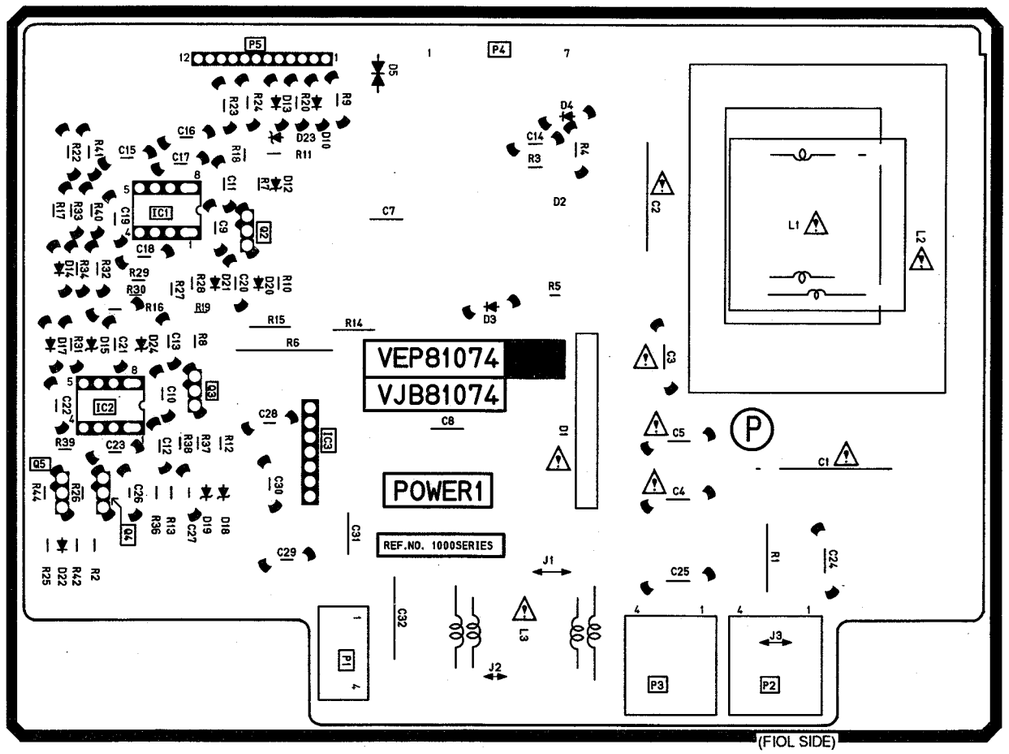
THE ▬ MARK INDICATES THE PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM THE SECONDARY CIRCUIT.
PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF THE PRODUCTS.

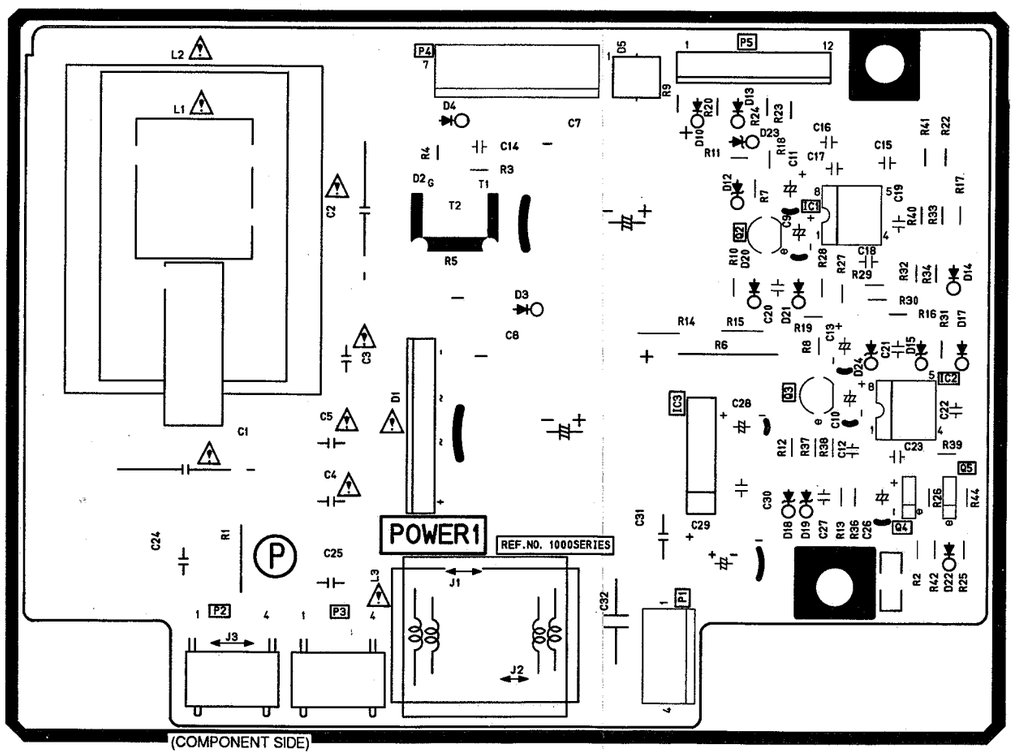
IMPORTANT SAFETY NOTICE:

COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

POWER 1	
Transistors	
Q2	B-6, B-1
Q3	B-7, B-1
Q4	A-7, A-1
Q5	A-7, A-1
Integrated Circuits	
IC1	B-7, B-1
IC2	B-7, B-1
IC3	B-6, B-1
Connectors	
P1	A-6, A-2
P2	A-5, A-3
P3	A-5, A-3
P4	C-5, C-2
P5	C-6, C-1

ADDRESS INFORMATION





3—14

POWER 2 P.C. BOARD (VEP81075A: AJ-D650/D640/D650P/D640P / VEP81075B: AJ-D650E/D640E)

JAPAN ONLY

⚠ 警　告	
感電注意	AC100V の加わっている活電部（充電部、活電部）に直接触れないでください。 ☞ 感電ややけどの可能性があります。

① ⚠ 警 告 ⚠ 印の部品は安全上重要な部品です。交換するときは、安全および性能維持のため必ず指定の部品をご使用ください。

② ▭ 内は充電部です。AC 100V が加わっておりますので点検、修理のときは感電しないよう充分ご注意ください。

③ 部品交換時には、電源プラグをぬいてから行ってください。

④ 一次側（充電部）の電圧・波形は、一次側アースを基準に測定してください。

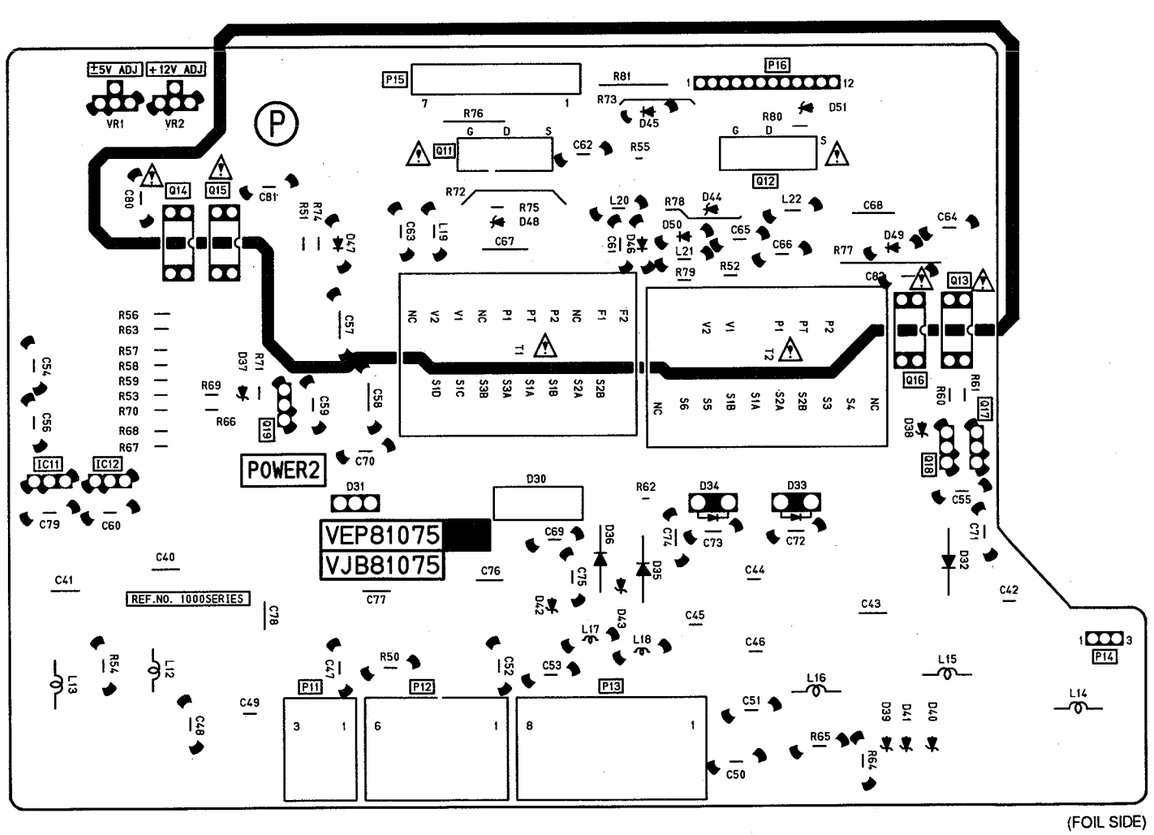
⑤ 部品品番は、部品価格表で確認の上交換ください。

CAUTION

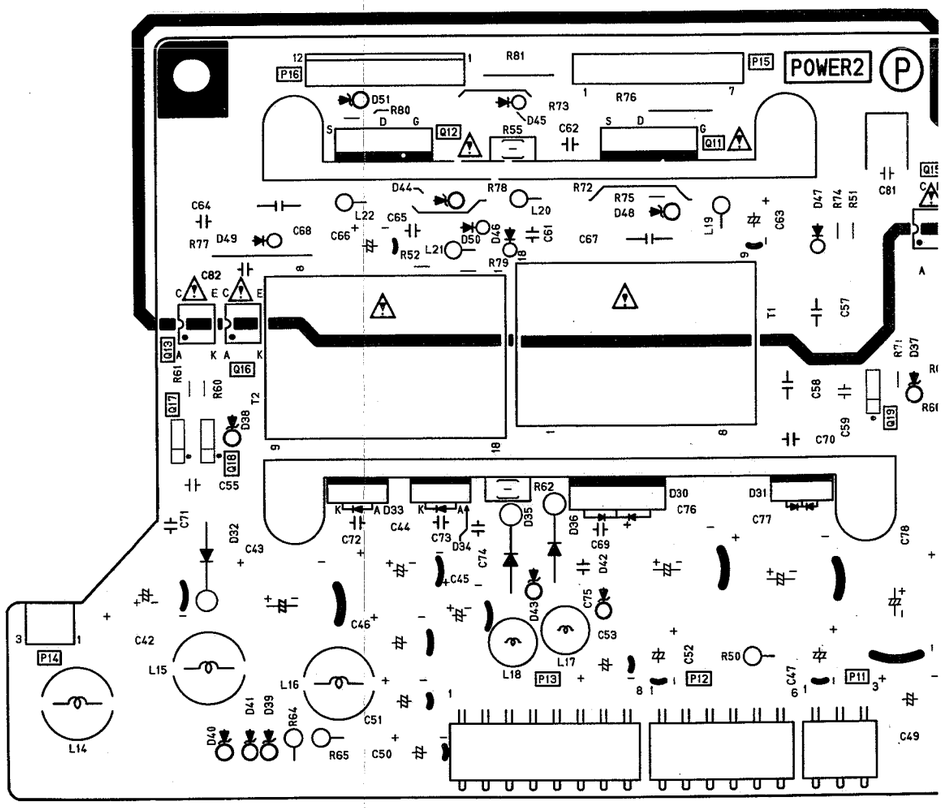
THE ▬▬ MARK INDICATES THE PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM THE SECONDARY CIRCUIT.
PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF THE PRODUCTS.

IMPORTANT SAFETY NOTICE:

COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.



(FOIL SIDE)



(COMPONENT SIDE)

CAUTION

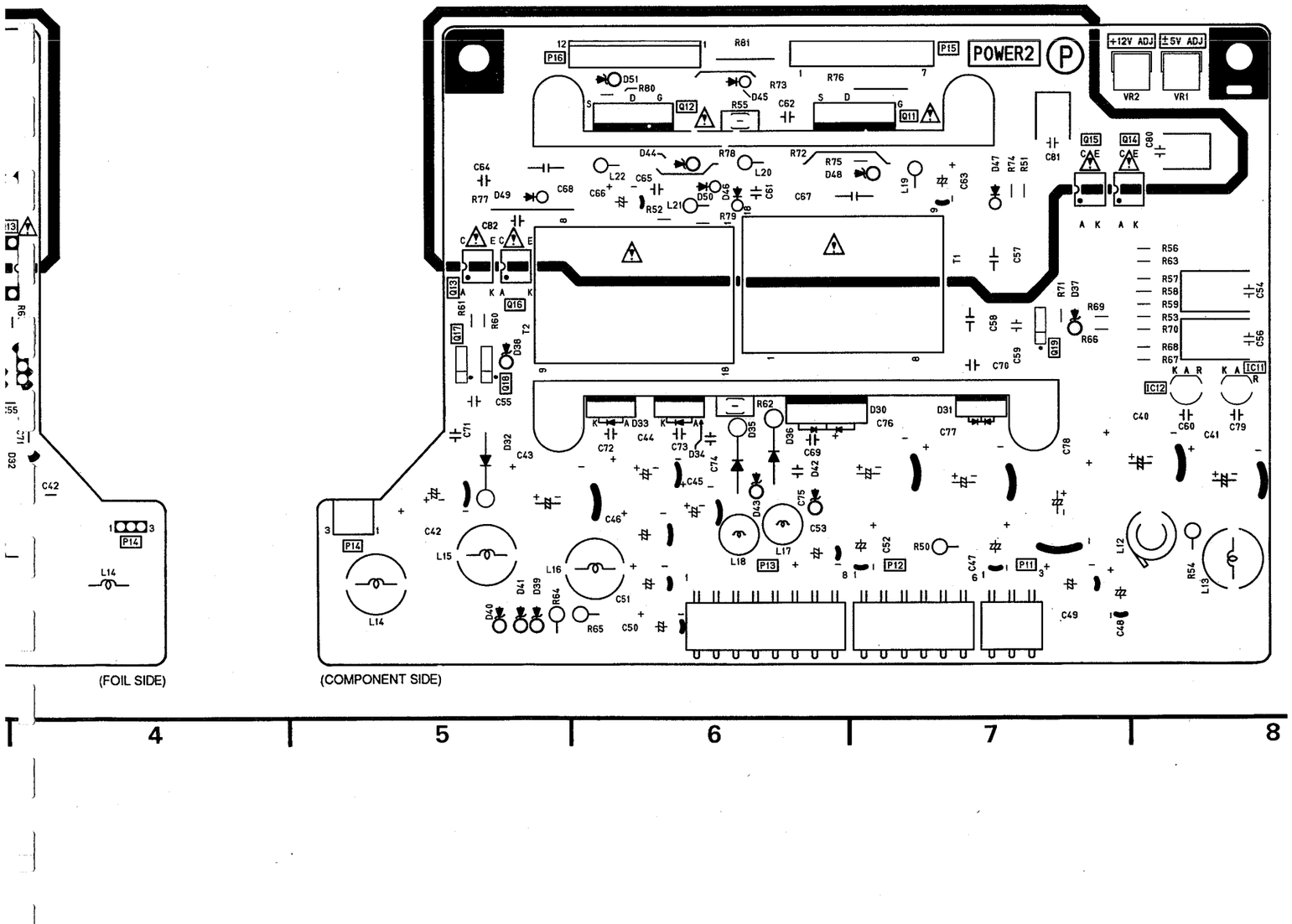
THE ▬▬ MARK INDICATES THE PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM THE SECONDARY CIRCUIT.
PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF THE PRODUCTS.

IMPORTANT SAFETY NOTICE:

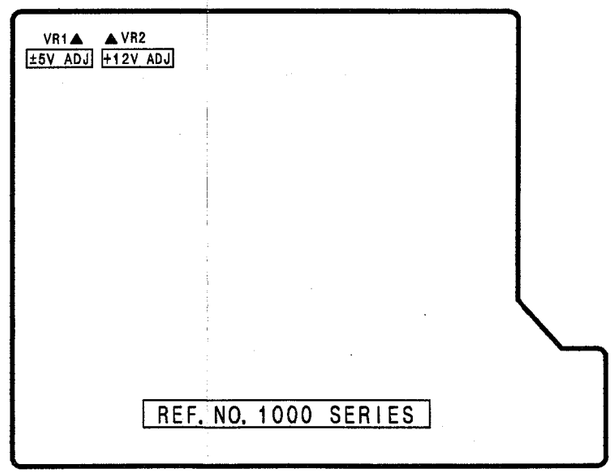
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

POWER 2	
Transistors	
Q11	C-7, C-2
Q12	C-6, C-3
Q13	B-5, B-3
Q14	C-8, B-1
Q15	C-7, B-1
Q16	B-5, B-3
Q18	B-5, B-3
Q19	B-7, B-1
Integrated Circuits	
IC11	B-8, B-1
IC12	B-8, B-1
Adjustments	
VR1	C-8, C-1
VR2	C-7, C-1
Connectors	
P11	A-7, A-2
P12	A-7, A-2
P13	A-6, A-2
P14	A-5, A-4

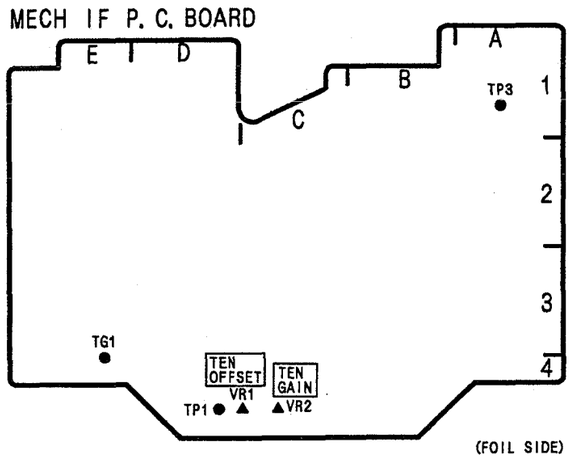
ADDRESS INFORMATION



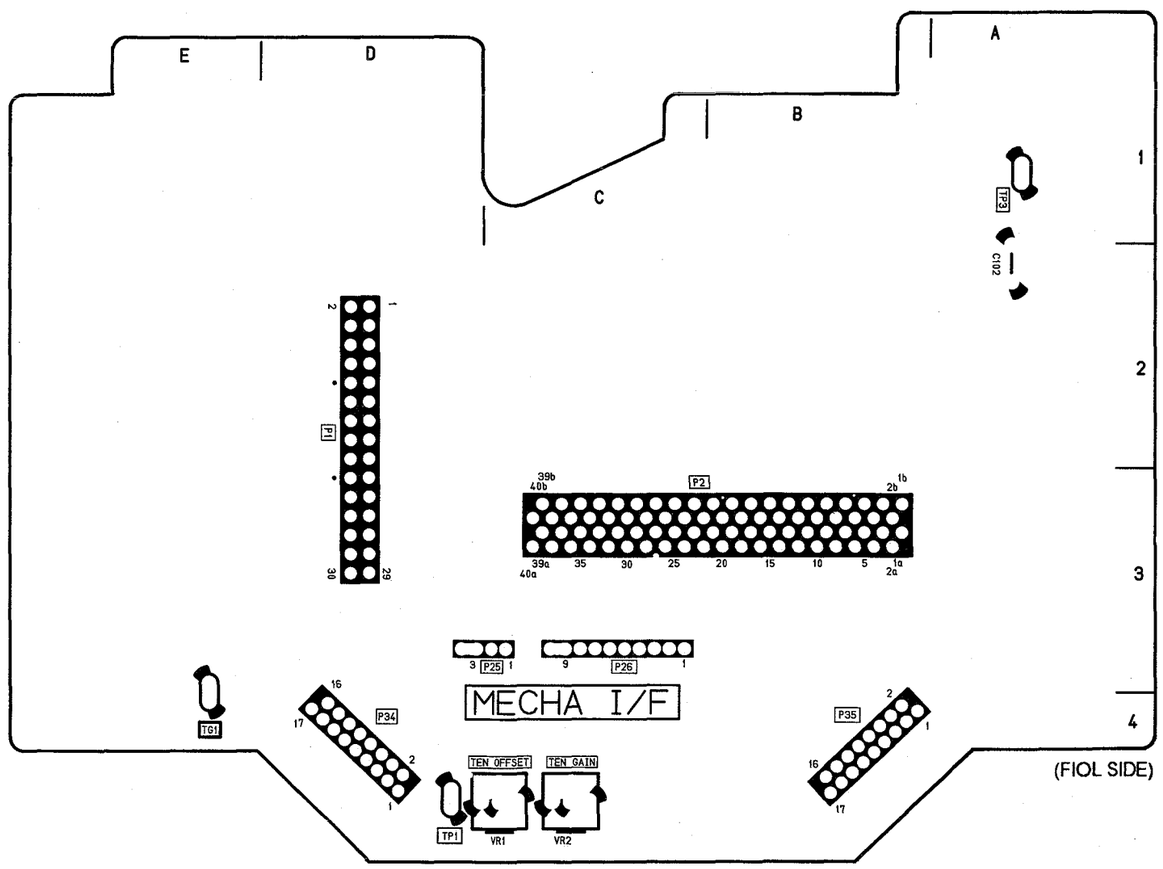
POWER 2 P. C. BOARD



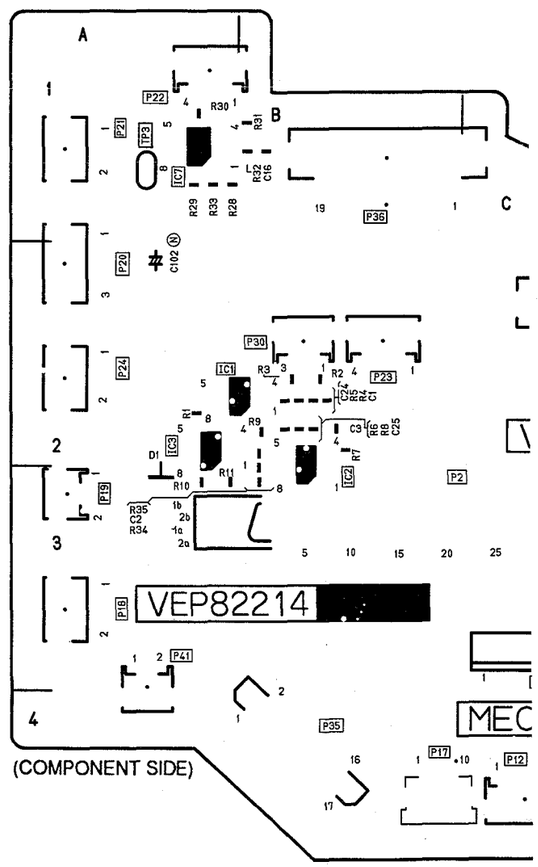
MECA IF P.C. BOARD (VEP82214A)



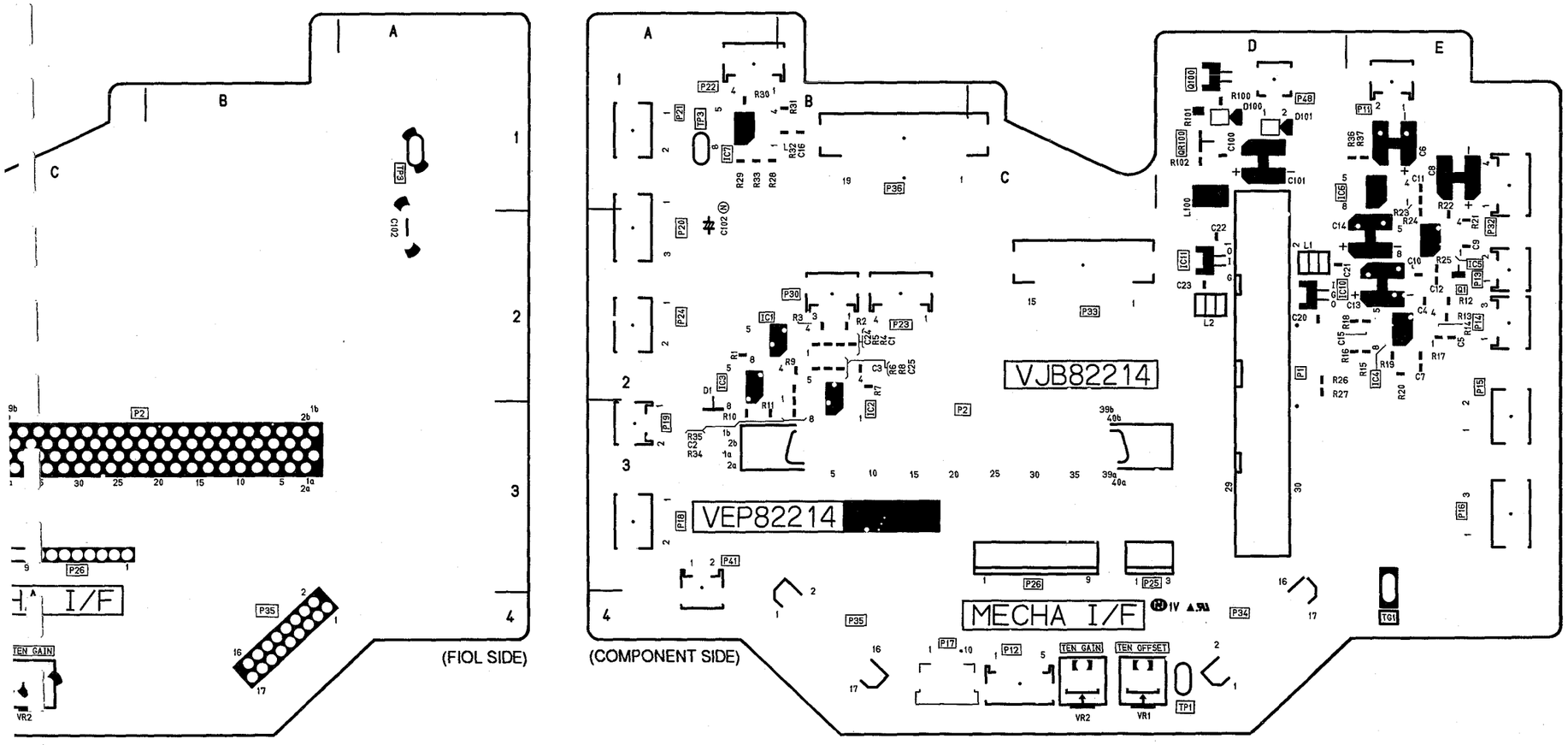
(FOIL SIDE)



(FIOL SIDE)



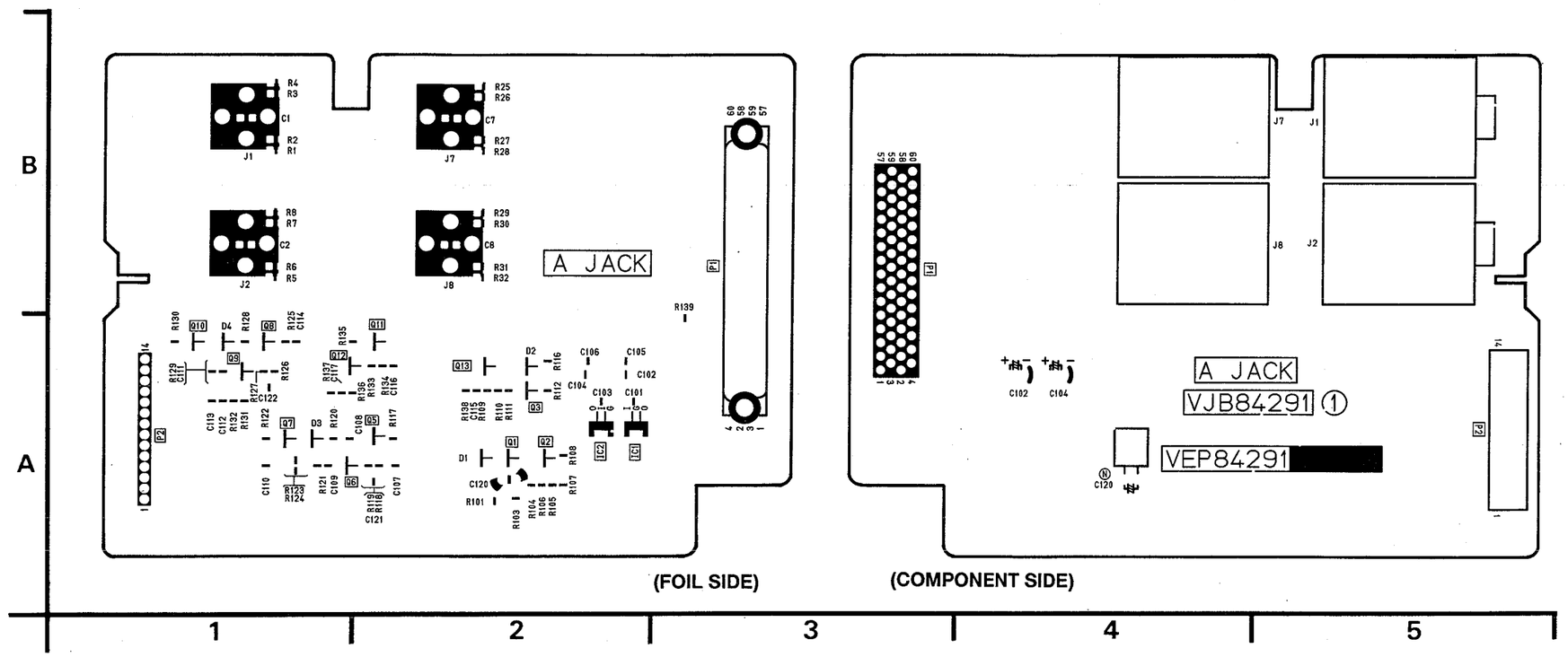
(COMPONENT SIDE)



MECH I/F		
Transistors		
Q1	E-2	©
Q100	D-1	©
Transistor-Resistor		
QR100	D-1	©
Integrated Circuits		
IC1	A-2	©
IC2	B-2	©
IC3	A-2	©
IC4	E-2	©
IC5	E-2	©
IC6	D-1	©
IC10	D-2	©
IC11	D-2	©
Test Points		
TP1	D-4	
TP3	A-1	
TG1	E-4	
Adjustments		
VR1	C-4	
VR2	C-4	
Connectors		
P1	D-2	
P2	C-3	
P11	E-1	©
P12	C-4	©
P13	E-2	©
P14	E-2	©
P15	E-2	©
P16	E-3	©
P17	B-4	©
P18	A-3	©
P19	A-3	©
P20	A-2	
P21	A-1	
P22	A-1	
P23	B-2	©
P24	A-2	©
P25	C-3	
P26	C-3	
P30	B-2	
P32	E-1	©
P33	C-2	©
P34	D-4	
P35	B-4	
P36	B-1	©
P41	A-3	©
P48	D-1	©

ADDRESS INFORMATION
© ... COMPONENT SIDE
Ⓕ ... FOIL SIDE

A JACK P.C. BOARD (VEP84291A: AJ-D650P/D640P/D650E/D640E / VEP84291B: AJ-D650/D640)



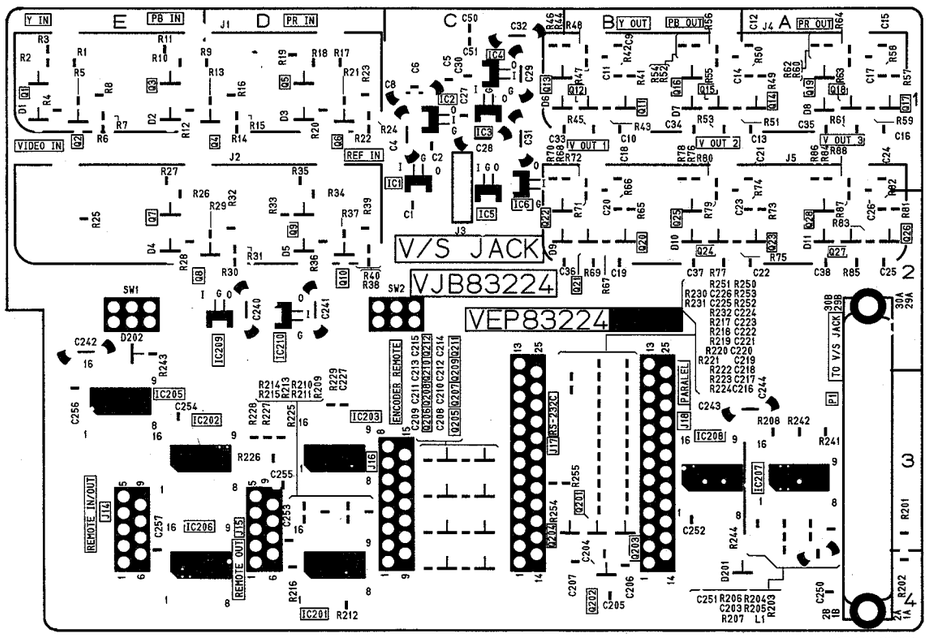
A JACK		
Transistors		
Q1	A-2	Ⓕ
Q2	A-2	Ⓕ
Q3	A-2	Ⓕ
Q5	A-2	Ⓕ
Q6	A-1	Ⓕ
Q7	A-1	Ⓕ
Q8	A-1	Ⓕ
Q9	A-1	Ⓕ
Q10	A-1	Ⓕ
Q11	A-2	Ⓕ
Q12	A-2	Ⓕ
Q13	A-2	Ⓕ
Integrated Circuits		
IC1	A-2	Ⓕ
IC2	A-2	Ⓕ
Connectors		
P1	B-3	
P2	A-1/A-5	Ⓕ/Ⓒ

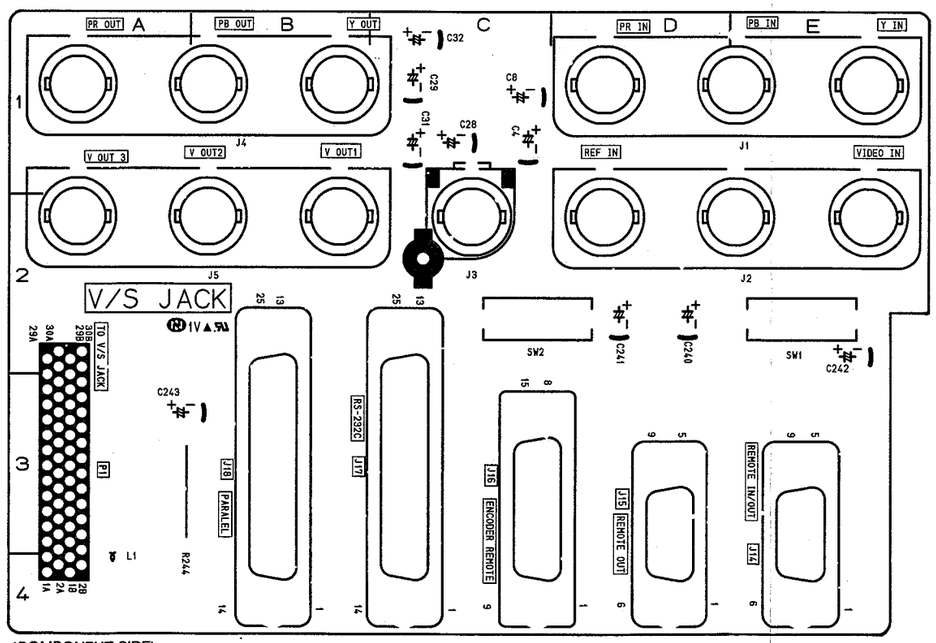
ADDRESS INFORMATION
Ⓒ... COMPONENT SIDE
Ⓕ... FOIL SIDE

V/S JACK		
Transistors		
Q1	E-1	Ⓕ
Q2	E-1	Ⓕ
Q3	E-1	Ⓕ
Q4	D-1	Ⓕ
Q5	D-1	Ⓕ
Q6	D-1	Ⓕ
Q7	E-2	Ⓕ
Q8	E-2	Ⓕ
Q9	D-2	Ⓕ
Q10	D-2	Ⓕ
Q11	B-1	Ⓕ
Q12	B-1	Ⓕ
Q13	C-1	Ⓕ
Q14	A-1	Ⓕ
Q15	B-1	Ⓕ
Q16	B-1	Ⓕ
Q17	A-1	Ⓕ
Q18	A-1	Ⓕ
Q19	A-1	Ⓕ
Q20	B-2	Ⓕ
Q21	B-2	Ⓕ
Q22	C-2	Ⓕ
Q23	A-2	Ⓕ
Q24	B-2	Ⓕ
Q25	B-2	Ⓕ
Q26	A-2	Ⓕ
Q27	A-2	Ⓕ
Q28	A-2	Ⓕ
Q201	B-3	Ⓕ
Q202	B-4	Ⓕ
Q203	B-3	Ⓕ
Q204	C-3	Ⓕ
Q205	C-3	Ⓕ
Q206	C-3	Ⓕ
Q207	C-3	Ⓕ
Q208	C-3	Ⓕ
Q209	C-3	Ⓕ
Q210	C-3	Ⓕ
Q211	C-2	Ⓕ
Q212	C-2	Ⓕ
Integrated Circuits		
IC1	C-1	Ⓕ
IC2	C-1	Ⓕ
IC3	C-1	Ⓕ
IC4	C-1	Ⓕ
IC5	C-2	Ⓕ
IC6	C-2	Ⓕ
IC201	D-4	Ⓕ
IC202	E-3	Ⓕ
IC203	D-3	Ⓕ
IC205	E-3	Ⓕ
IC206	E-3	Ⓕ
IC207	A-3	Ⓕ
IC208	B-3	Ⓕ
IC209	D-2	Ⓕ
IC210	D-2	Ⓕ
Switches		
SW1	E-2	
SW2	C-2	
Connector		
P1	A-3	

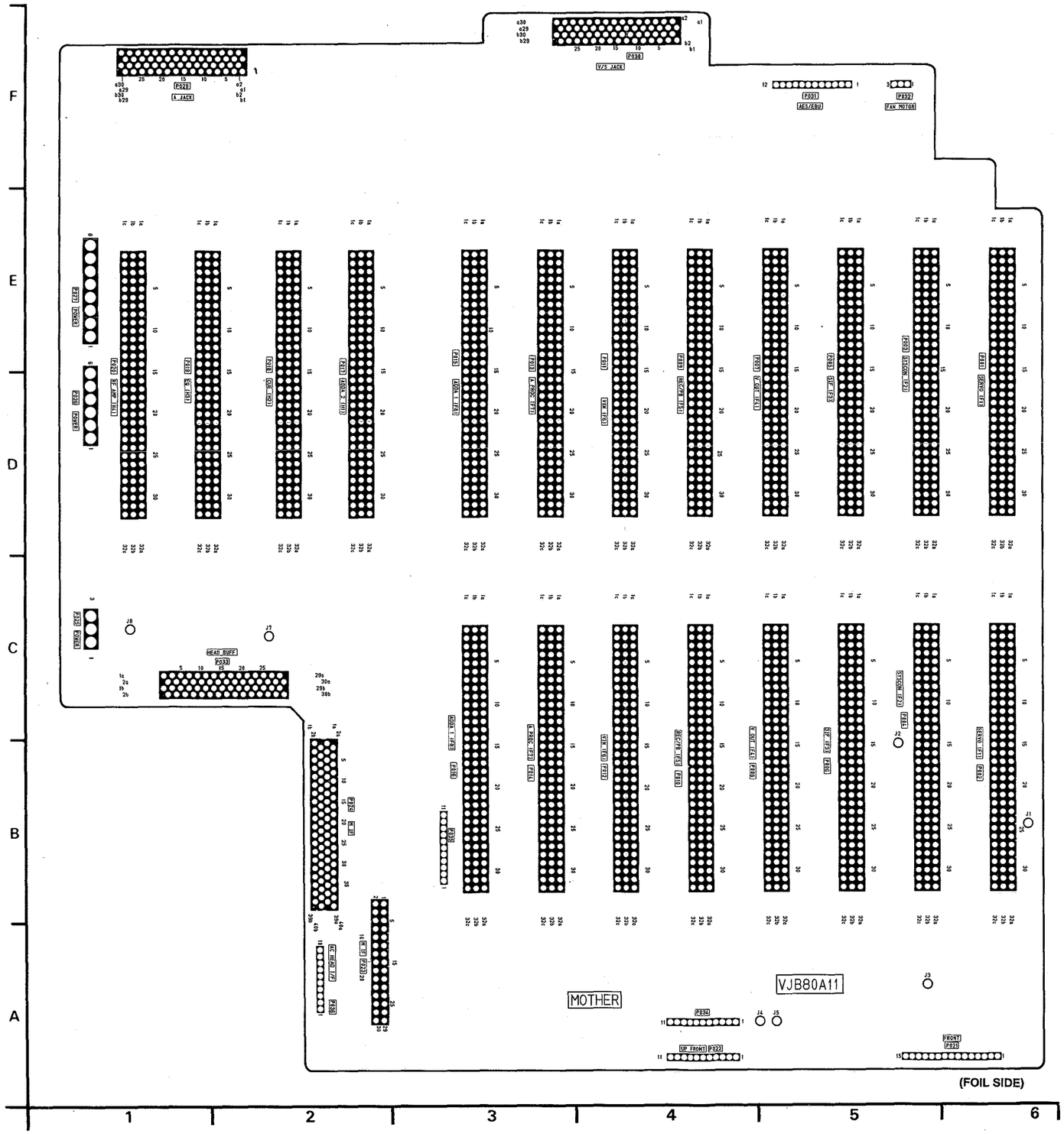
ADDRESS INFORMATION
Ⓒ... COMPONENT SIDE
Ⓕ... FOIL SIDE

V/S JACK P.C. BOARD (VEP83224B)





MOTHER P.C. BOARD (VEP80A11A)



MOTHER	
Connectors	
P010	C-4
P011	E-4
P012	C-4
P013	E-3
P014	C-3
P015	E-3
P016	C-3
P019	E-1
P020	E-1
P021	A-6
P022	A-4
P023	A-2
P024	B-2
P025	C-1
P026	D-1
P027	E-1
P029	F-1
P030	F-4
P031	F-5
P032	F-5
P033	C-2
P036	A-2
P001	E-6
P002	C-6
P003	E-5
P004	C-5
P005	E-5
P006	C-5
P007	E-5
P008	C-5
P009	E-4

ADDRESS INFORMATION

3—18

5x

! Warning

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advice non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service manual by anyone else could result in serious injury or death.

Order No. VSD9710SA131
D20

Service Manual

Supplement

Broadcast Product

Subject : Introduction of New MECHA I/F P.C. Board

Please use this supplement together with the Service Manual as follows :

Model No.	Bulletin No.	Order No.	Effective from
AJ-D750P	131	VSD9603M202A/B	C7TRB0001
AJ-D650P	60	VSD9611MG01A/B	C7TRA0001
AJ-D640P	60	VSD9611MG01A/B	C7TRA0001

Board : System Control (F2:VEP86146A/C/D)
MECHA I/F (VEP82216A)

To improve the manufacturing productivity and serviceability, a new MECHA I/F P.C. Board (VEP82216A / VJB82216) is introduced. This Supplement Service Manual contains the following items.

1). Parts List
2). Schematic Diagram
3). P.C. Board Layout

According to this change, the following modification is performed.
1). MECHA I/F Sub Board (VEP82210A) is absorbed in the new P.C. Board.
2). Resistors R11 and R12 are changed from 1/10W, 3.3KΩ to 1/10W, 8.2KΩ on the foil side of the System Control Board.

*** Note * There is a modification difference by the paring of the MECHA I/F and System Control Boards as shown below. Please confirm the MECHA I/F and System Control Boards version and perform the modification.**

Part Number					
Ref. No.	Original Part No.	New Part No.	Part Name & Descriptions	Pcs	Remarks
R11, 12	ERJ6GEYJ332	ERJ6GEYF822	M. RESISTOR CH 1/10W 8.2K	2	

AJ-D750 – VEP86146A

Ref. No.	Schematic Diagram		P.C. Board	
	Page	Area No.	Page	Area No.
R11, R12	2-32	C-8 (1/14)	3-3	C-2 (F)

AJ-D650/D640 – VEP86146C/D

Ref. No.	Schematic Diagram		P.C. Board	
	Page	Area No.	Page	Area No.
R11, R12	2-31	E-5 (1/14)	3-4	C-2 (F)

10164498550375053102295021

Panasonic

© 1997 Matsushita Electric Industrial Co., Ltd. All rights reserved.
Unauthorized copying and distribution is a violation of law.

a). MECHA I/F Board is VEP82106A or VEP82214A and the R11 and R12 on the System Control Board are not 8.2KΩ.
Photo Sensor Voltage Adjustment (A) is performed. If the voltage specification A is not 3.0 ~ 4.3VDC, resistors R11 and R12 are changed from 3.3KΩ to 1KΩ first and then to 820Ω as follows until the voltage specification is within 3.0 ~ 4.3VDC.

b). MECHA I/F Board is VEP82106A or VEP82214A and the R11 and R12 on the System Control Board are 8.2KΩ.
Photo Sensor Voltage Adjustment (A) is performed. If the voltage specification A is not 3.0 ~ 4.3VDC, resistors R11 and R12 are changed as follows until the voltage specification is within 3.0 ~ 4.3VDC.
8.2KΩ → 3.3KΩ → 1KΩ → 820Ω

c). MECHA I/F Board is VEP82216A and the R11 and R12 on the System Control Board are not 8.2KΩ.
Photo Sensor Voltage Adjustment (B) is performed by the Dip Switch after changing the resistors R11 and R12 from 3.3KΩ to 8.2KΩ.

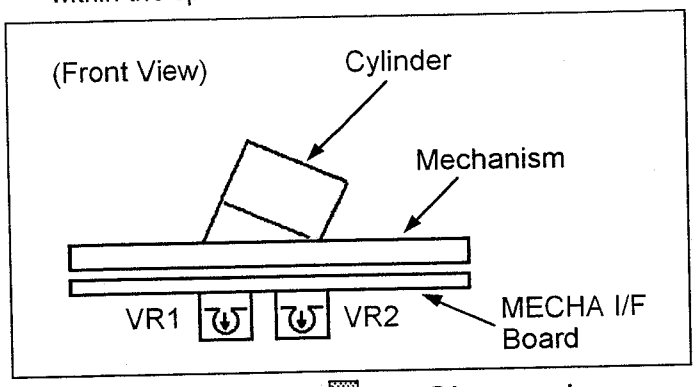
d). MECHA I/F Board is VEP82216A and the R11 and R12 on the System Control Board are 8.2KΩ.
Photo Sensor Voltage Adjustment (B) is performed and R11 and R12 value changes are not required.

3). The position of the Tension Sensor Voltage VR is changed to adjust easy as shown below.

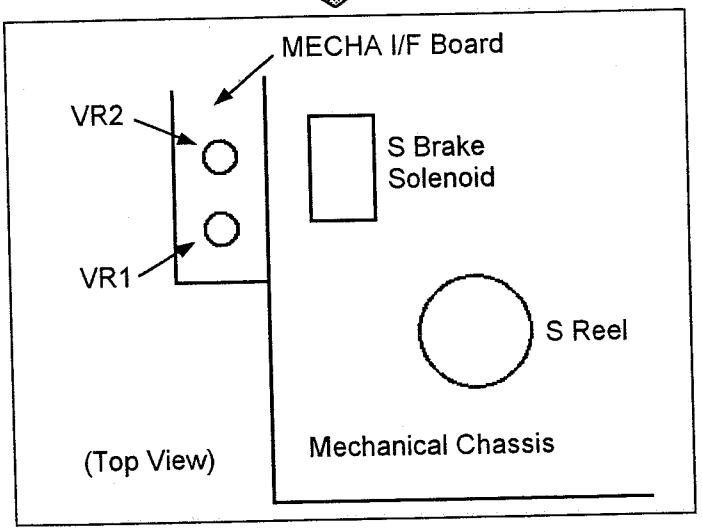
5-8. Tension Arm Offset Voltage Adjustment

Specification	2.5 ± 0.5 (V)
Mode	EJECT
Test Point	TP201 (Servo Board : F1)
Equipment	Digital Volt Meter
Adjustment	VR1 (MECHA I/F Board : Bottom of Mechanism)

1. Adjust VR1 so that the DC voltage at TP201 is within the specification in EJECT mode.



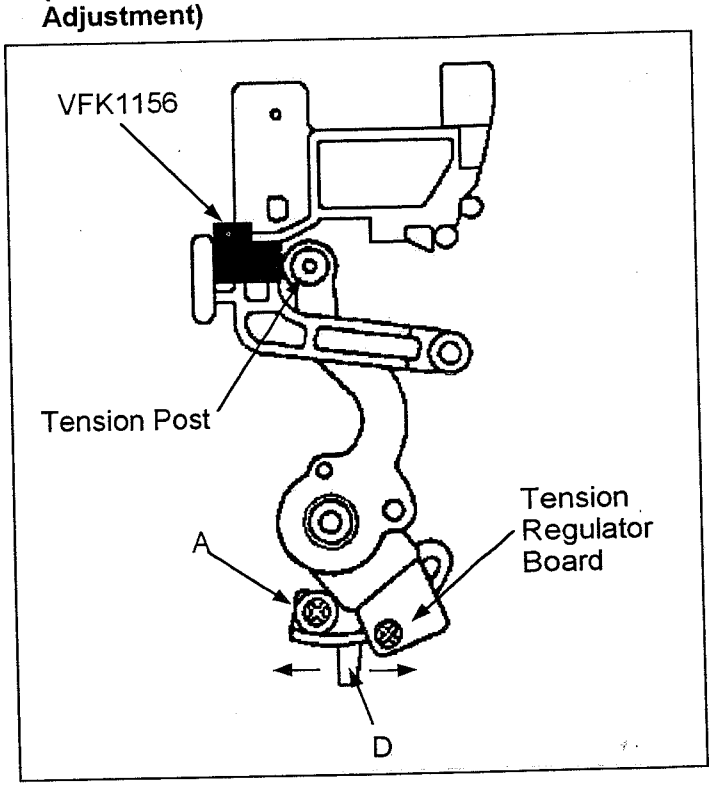
Changed



5-10. Tension Arm PLAY Voltage Adjustment

Specification	3.8 ± 0.05 (V)
Mode	STOP
Test Point	TP201 (Servo Board : F1)
Equipment	Digital Volt Meter
Adjustment	VR2 (MECHA I/F Board : **See 5-8. Offset Voltage Adjustment)**
Tool	VFK1156

1. Set the VFK1156 at the suitable position. (Tension Arm Tool : Play, Black color)
2. Place into the loading mode without a tape.
3. Adjust VR2 so that the specification of TP201 in STOP mode is within the specification.
(Refer to item 5-8. Tension Arm Offset Voltage Adjustment)



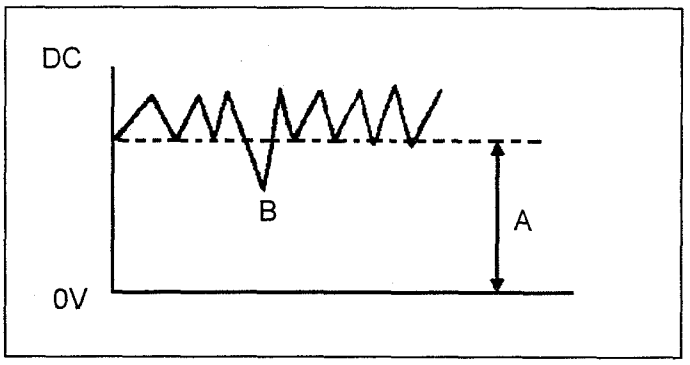
4). As the tape beginning/end detect photo sensor voltage may be out of specification due to the tolerance of the parts, the Dip Switch SW200 for the photo sensor voltage adjustment is added on the MECHA I/F Board. According to this, the Photo Sensor Voltage Adjustment is added to the System Control Board.

(A). MECHA I/F Board version is VEP82106A or VEP82214A

2-2. Photo Sensor Voltage Adjustment

BOARD	SYSCON (F2)
SPEC.	A = 3.0V ~ 4.3V
TP	P2-26A (S Photo), P2-25A (T Photo)
ADJUST	---
INPUT	---
MODE	STOP
TAPE	Tape Sensor Cassette VFK1369
M. EQ	Oscilloscope

1. Connect the Extension Board and the power is turned ON.
2. Insert the Tape Sensor Adjustment Cassette. (VFK1369)
3. Measure the P2-25A and P2-26A with the oscilloscope and then confirm that the S and T DC levels (A) are within 3.00 ~ 4.3V.
4. If the S and T DC levels are out of specification, resistor values R11 (T side) and R12 (S side) are changed from 3.3KΩ to 1KΩ after power OFF and then confirm that the DC levels are within specification.
5. If the S and T DC levels are out of specification, resistor values R11 (T side) and R12 (S side) are changed from 1KΩ to 820Ω after power OFF and then confirm that the DC levels are within specification.



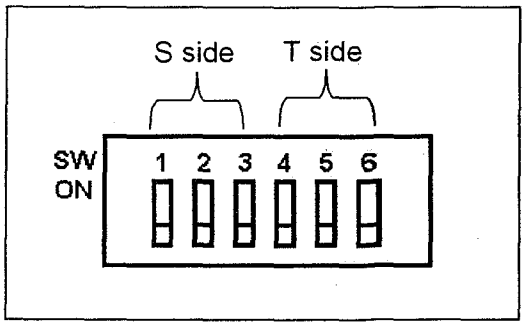
(B). MECHA I/F Board version is VEP82216A

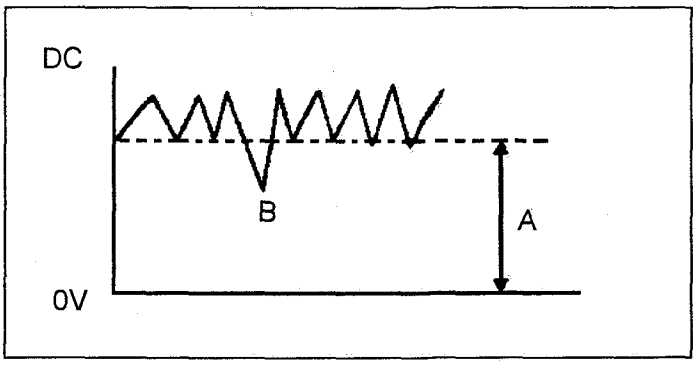
2-2. Photo Sensor Voltage Adjustment

BOARD	SYSCON (F2)
SPEC.	A = 3.0V ~ 4.3V
TP	P2-26A (S Photo), P2-25A (T Photo)
ADJUST	SW200 (MECHA I/F)
INPUT	---
MODE	STOP
TAPE	Tape Sensor Cassette VFK1369
M. EQ	Oscilloscope

1. Insert the Tape Sensor Adjustment Cassette. (VFK1369)
2. Set the SW200 on the MECHA I/F Board so that the S and T DC levels become within 3.00 ~ 4.3V.

S Photo	T Photo	Up --- A Voltage --- Down							
SW-1	SW-4	OFF	ON	OFF	ON	OFF	ON	OFF	ON
SW-2	SW-5	OFF	OFF	ON	ON	OFF	OFF	ON	ON
SW-3	SW-6	OFF	OFF	OFF	OFF	ON	ON	ON	ON
Resistor Value		8200	3300	1050	880	750	660	460	420





Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
■	VEP82216A	MECH I/F P.C.BOARD	1	(RTL)
C1	ECUX1H561JCV	C.CAPACITOR CH 50V 560P	1	
C2-C5	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	4	
C6	ECEV1CV220Q	E.CAPACITOR CH 16V 22U	1	
C7	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C8	ECEV1CV470Q	E.CAPACITOR CH 16V 47U	1	
C9,10	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C11	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C12	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C13,14	ECEV1CV470Q	E.CAPACITOR CH 16V 47U	2	
C15	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C20	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C21	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C22	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C23	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C100	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C101	ECEV1CV470Q	E.CAPACITOR CH 16V 47U	1	
C102	ECA1HEN101	E.CAPACITOR 50V 100U	1	
C103	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C104	ECEV1CV100Q	E.CAPACITOR CH 16V 10U	1	
C200-02	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	3	
D1	MA157	DIODE	1	
D100-02	MA738	DIODE	3	
IC1,C2	OP177GS	IC	2	
IC3	NJM4580ED	IC	1	
IC4-C6	UPC4558G2	IC	3	
IC10	NJM78L09UA	IC	1	
IC11	NJM79L09UA	IC	1	
IC100	MC14538BF	IC	1	
L1,L2	VLF1016A470	FILTER	2	
L100	VLP0133	COIL	1	
P1	VJP2891A030	CONNECTOR (MALE)	1	
P2	VJP3418A080	CONNECTOR (MALE)	1	
P11	VJP3172D002	CONNECTOR (MALE)	1	
P12	VJP3172D005	CONNECTOR (MALE)	1	
P13	VJP3172D002	CONNECTOR (MALE)	1	
P14	VJP3172D003	CONNECTOR (MALE)	1	
P15	VJP3518B002	CONNECTOR (MALE)	1	
P16	VJP3518B003	CONNECTOR (MALE)	1	
P17	VJS3801B010	CONNECTOR (FEMALE)	1	
P18	VJP3518B002	CONNECTOR (MALE)	1	
P19	VJP3172D002	CONNECTOR (MALE)	1	
P20	VJP3518B003	CONNECTOR (MALE)	1	
P21	VJP3518B002	CONNECTOR (MALE)	1	
P22	VJP3172D004	CONNECTOR (MALE)	1	
P24	VJP3518B002	CONNECTOR (MALE)	1	
P25	VJP1230T	CONNECTOR (MALE) 3P	1	
P26	VJP1236T	CONNECTOR (MALE) 9P	1	
P30	VJP3172D003	CONNECTOR (MALE)	1	
P32	VJP3172D004	CONNECTOR (MALE)	1	
P33	VJS3406B015	CONNECTOR (FEMALE)	1	
P34,35	VJS2889A017	CONNECTOR (FEMALE)	2	
P36	VJS3406B019	CONNECTOR (FEMALE)	1	
P41	VJP3172D002	CONNECTOR (MALE)	1	
P48	VJP3125B002	CONNECTOR (MALE)	1	
Q1	2SB1218A-R	TRANSISTOR	1	
Q100,01	2SB766-R	TRANSISTOR	2	
QR100,01	UN2214	TRANSISTOR-RESISTOR	2	
R1	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
R2,R3	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	2	
R4	ERJ3RBD562	M.RESISTOR CH 3W 5.2K	1	
R5	ERJ3RBD473	M.RESISTOR CH 3W 47K	1	
R6	ERJ3RBD562	M.RESISTOR CH 3W 5.2K	1	
R7	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R8	ERJ3RBD333	M.RESISTOR CH 3W 33K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R9	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R10	ERJ3RBD562	M.RESISTOR CH 3W 5.2K	1	
R11	ERJ3RBD473	M.RESISTOR CH 3W 47K	1	
R12,13	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	2	
R14	ERJ6RBD104	M.RESISTOR CH 1/10W 100K	1	
R15	ERJ6RBD823	M.RESISTOR CH 1/10W 82K	1	
R16	ERJ6RBD273	M.RESISTOR CH 1/10W 27K	1	
R17	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R18	ERJ6RBD392	M.RESISTOR CH 1/10W 3.9K	1	
R19	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1	
R20	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R21	ERJ6RBD183	M.RESISTOR CH 1/10W 18K	1	
R22	ERJ6RBD473	M.RESISTOR CH 1/10W 47K	1	
R23	ERJ6RBD682	M.RESISTOR CH 1/10W 6.8K	1	
R24	ERJ6RBD222	M.RESISTOR CH 1/10W 2.2K	1	
R25	ERJ6RBD391	M.RESISTOR CH 1/10W 390	1	
R36,37	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R100	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R101	ERJ8GCYJ102	M.RESISTOR CH 1/8W 1K	1	
R102	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R103	ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
R104	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R105	ERJ8GCYJ102	M.RESISTOR CH 1/8W 1K	1	
R200	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
R201	ERJ6GEYG122	M.RESISTOR CH 1/10W 1.2K	1	
R202	ERJ6GEYG821	M.RESISTOR CH 1/10W 820	1	
R203	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
R204	ERJ6GEYG122	M.RESISTOR CH 1/10W 1.2K	1	
R205	ERJ6GEYG821	M.RESISTOR CH 1/10W 820	1	
SW200	VSS023706	SWITCH	1	
VR1	EVMEGSA00B24	V.RESISTOR 20K	1	
VR2	EVMEGSA00B54	V.RESISTOR 50K	1	

! Warning

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advice non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service manual by anyone else could result in serious injury or death.

Order No. VSD9710SA137
D20

Service Manual

Supplement

Broadcast Product

Subject : Introduction of New REC PB P.C. Board

Please use this supplement together with the Service Manual as follows :

Model No.	Bulletin No.	Order No.	Effective from
AJ-D750P	137	VSD9603M202A/B	E7TRC0001
AJ-D650P	67	VSD9611MG01A/B	E7TRA0001
AJ-D640P	67	VSD9611MG01A/B	E7TRA0001

Board : REC PB (F5:VEP83353A)

To improve the manufacturing productivity and introduce the new function, a new F5 REC PB P.C. Board (VEP83353A-3 / VJB83353-2) is introduced. This Supplement Service Manual contains the following items.

1). Parts List
2). Schematic Diagram
3). P.C. Board Layout

< AJ-D750 >

According to this change, the following functions are introduced.

1). EE TEST MODE of the VIDEO ADJUST on the Service Menu can be available.
2). New TAPE_CNT LSI is introduced.

*** Note * AV PROM must be up-graded more than version N1.09 at the same time. This AV PROM has been introduced from October 1996 production. Please refer to the Supplement Service Manual No. VSD9701SA071.**

VSI2165J N1.09 : 8163

100734919102435048

Panasonic

© 1997 Matsushita Electric Industrial Co., Ltd. All rights reserved.
Unauthorized copying and distribution is a violation of law.

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
■	VEP83353A	F5 REC PB P. C. BOARD	1	(RTL)
C3101-08	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	8	
C3121	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
C3122	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C3123	ECUM1H331JCN	C. CAPACITOR CH 50V 330P	1	
C3124	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1	
C3125, 26	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C3127	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1	
C3128	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C3129	ECEV1EN3R3Q	E. CAPACITOR CH 25V 3.3U	1	
C3130	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1	
C3131	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C3132	ECUM1H102JCN	C. CAPACITOR CH 50V 1000P	1	
C3134	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C3135	ECUM1H151JCN	C. CAPACITOR CH 50V 150P	1	
C3136	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1	
C3137, 38	ECUM1H101JCN	C. CAPACITOR CH 50V 100P	2	
C3139, 40	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C3141	ECUM1H101JCN	C. CAPACITOR CH 50V 100P	1	
C3142	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
C3145	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1	
C3146, 47	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C3148	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1	
C3149	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C3150	ECEV1EN3R3Q	E. CAPACITOR CH 25V 3.3U	1	
C3151	ECUM1H102JCN	C. CAPACITOR CH 50V 1000P	1	
C3152	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1	
C3153-62	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	10	
C3171-84	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	14	
C3185	ECUM1H102JCN	C. CAPACITOR CH 50V 1000P	1	
C3191-15	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	25	
C3216	ECUM1H102JCN	C. CAPACITOR CH 50V 1000P	1	
C3221-28	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	8	
C3229	ECUM1H102JCN	C. CAPACITOR CH 50V 1000P	1	
C3241	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
C3242-49	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	8	
C3250	ECUM1H102JCN	C. CAPACITOR CH 50V 1000P	1	
C3261	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
C3262	ECUM1H100DCN	C. CAPACITOR CH 50V 10P	1	
C3263	ECUM1H102JCN	C. CAPACITOR CH 50V 1000P	1	
C3264	ECUX1H180JCN	C. CAPACITOR CH 50V 18P	1	
C3265-68	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	4	
C3269	ECUM1H102JCN	C. CAPACITOR CH 50V 1000P	1	
C3281-89	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	9	
C3292, 93	ECUM1H102JCN	C. CAPACITOR CH 50V 1000P	2	
C3301-18	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	18	
C3319	VCK0151	C. CAPACITOR	1	
C3320	ECUX1H180JCN	C. CAPACITOR CH 50V 18P	1	
C3321	ECUM1H682KBN	C. CAPACITOR CH 50V 6800P	1	
C3322	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1	
C3323	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C3324	ECUX1H180JCN	C. CAPACITOR CH 50V 18P	1	
C3325	ECUM1H682KBN	C. CAPACITOR CH 50V 6800P	1	
C3326	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1	
C3327, 28	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C3329	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C3330	ECEV1HV2R2Q	E. CAPACITOR CH 50V 2.2U	1	
C3331	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C3332	ECEV1HV2R2Q	E. CAPACITOR CH 50V 2.2U	1	
C3333	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C3334	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1	
C3335	ECUX1H180JCN	C. CAPACITOR CH 50V 18P	1	
C3336	ECUM1H682KBN	C. CAPACITOR CH 50V 6800P	1	
C3337	ECUM1H102JCN	C. CAPACITOR CH 50V 1000P	1	
C3341-53	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	13	
C3354	ECUM1H102JCN	C. CAPACITOR CH 50V 1000P	1	
C3361, 62	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C3367-70	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	4	
C3381-92	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	12	
C3421-32	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	12	
C3441	ECUM1H102JCN	C. CAPACITOR CH 50V 1000P	1	
C3442-45	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	4	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C3451-58	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	8	
C3459	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
C3460, 61	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C3471-77	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	7	
C3478	ECUM1H102JCN	C. CAPACITOR CH 50V 1000P	1	
C3485, 86	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C3491-95	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	5	
C3501	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C3502-04	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	3	
C3506	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
C3509	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C3510	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1	
C3511	ECEV0JV470Q	E. CAPACITOR CH6.3V 47U	1	
C3512	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C3513	ECUX1H180JCN	C. CAPACITOR CH 50V 18P	1	
C3514	ECUX1H150JCN	C. CAPACITOR CH 50V 15P	1	
C3515, 16	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C3520	ECEV0JV470Q	E. CAPACITOR CH6.3V 47U	1	
C3521, 22	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C3523-25	ECUM1H102JCN	C. CAPACITOR CH 50V 1000P	3	
C3601	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C3602	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
C3605	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C3701, 02	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C3703	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C3704, 05	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C3706	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C3707, 08	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C3709	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C3710, 11	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C3712	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1	
C3713, 14	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C3715	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1	
C3716, 17	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C3718	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1	
C3719, 20	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C3721	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1	
C3722, 23	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C3724	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1	
C3725, 26	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C3727	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1	
C3731-33	ECUM1H331JCN	C. CAPACITOR CH 50V 330P	3	
C3741, 42	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C3743	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1	
C3744, 45	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C3746	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1	
D3101	MA715	DIODE	1	
D3102	MA335-R	DIODE	1	
D3103, 04	MA152K	DIODE	2	
D3111, 12	MA701A	DIODE	2	
D3501-03	MA715	DIODE	3	
D3507, 08	MA152K	DIODE	2	
FL3101	VLF1116	FILTER	1	
FL3102	VLF1117	FILTER	1	
FL3103	VLF1118	FILTER	1	
FL3104-06	VLF1016A223	FILTER	3	
IC3001	UPD65841G025	IC	1	
IC3003	MN67372A2	IC	1	
IC3004	MN4706F	IC	1	
IC3005	MN673711	IC	1	
IC3006	M65401FP	IC	1	
IC3007	L7A1433	IC	1	
IC3008	MB81V4260S7	IC	1	
IC3009, 10	L7A1434	IC	2	
IC3011	L7A1433	IC	1	
IC3012	MB81V4260S7	IC	1	
IC3013	MN673711	IC	1	
IC3014	M65401FP	IC	1	
IC3015	M52860FP	IC	1	
IC3016	MN67372A2	IC	1	
IC3017	MN4706F	IC	1	
IC3018-21	UPD42280G3	IC	4	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC3022	UPD65843G026	IC	1	
IC3023	UPD42280G3	IC	1	
IC3024	UPD65868D022	IC	1	
IC3025	UPD71055GB	IC	1	
IC3028	UPD42280G3	IC	1	
IC3030	UPD71055GB	IC	1	
IC3031	T160G41-1437	IC	1	
IC3101, 02	TCVHC257F	IC	2	
IC3103, 04	T74VHCT244F	IC	2	
IC3105	MC74HC125AF	IC	1	
IC3107	TC7S66F	IC	1	
IC3108, 09	NJM082BM	IC	2	
IC3110	TC7S04F	IC	1	
IC3111, 12	74F244SJ	IC	2	
IC3113	T74LCX244F	IC	1	
IC3114	MC10H124M	IC	1	
IC3115-17	T74LCX244F	IC	3	
IC3118-20	T74VHC244F	IC	3	
IC3121	MC10H125M	IC	1	
IC3122	T74LCX244F	IC	1	
IC3123-26	T74VHC245F	IC	4	
IC3127	TC7S66F	IC	1	
IC3128	T74VHCT244F	IC	1	
IC3129	MC10H124M	IC	1	
IC3130	TC7S66F	IC	1	
IC3131	T74VHC08F	IC	1	
IC3132	TCVHC257F	IC	1	
IC3133	T74VHCT244F	IC	1	
IC3134-36	T74VHC244F	IC	3	
IC3141-44	74ALS541SJ	IC	4	
IC3145	MC10H125M	IC	1	
IC3146, 47	T74LCX244F	IC	2	
IC3148	T74VHC74F	IC	1	
IC3149, 50	SN74S1051NS	IC	2	
IC3151, 52	74ALS541SJ	IC	2	
IC3153	74ALS245ASJ	IC	1	
IC3154	74AC139SJ	IC	1	
IC3156	T74VHC244F	IC	1	
IC3157	TC7S04F	IC	1	
IC3158	T74VHC244F	IC	1	
IC3159-61	TCVHC257F	IC	3	
IC3162	T74VHC74F	IC	1	
IC3163, 64	T74VHCT244F	IC	2	
IC3165, 66	T74VHC245F	IC	2	
IC3167, 68	T74VHC244F	IC	2	
IC3169	TC7S04F	IC	1	
IC3201	NJM78L09UA	IC	1	
IC3202	NJM79L09UA	IC	1	
IC3203	NJM78L05UA	IC	1	
IC3204	XC62ASOCXXP	IC	1	
IC3205	XC62AP3202P	IC	1	
IC3206	XC62AP2302P	IC	1	
IC3207, 08	XC62AP3202P	IC	2	
IC3209	XC62AP2302P	IC	1	
IC3210, 11	XC62AP3202P	IC	2	
IC3501	M37709M4L165	IC	1	
IC3502	S80727ANDQ	IC	1	
IC3503	T74VHC08F	IC	1	
IC3504	T74VHCU04F	IC	1	
IC3505	XC62AP3202P	IC	1	
IC3507, 08	TC7S66F	IC	2	
IC3601	M37709M4L165	IC	1	
IC3603	T74VHC08F	IC	1	
L3101-06	VLQ0319K470	COIL 47UH	6	
L3107	VLQ0163J3R9	COIL 3.9UH	1	
L3108	VLQ0319K470	COIL 47UH	1	
L3111	VLQ0163J1R5	COIL 1.5UH	1	
L3121-23	VLQ0319K100	COIL 10UH	3	
L3131, 32	VLP0133	COIL	2	
L3501	VLQ0319K470	COIL 47UH	1	
P3001, 02	VJP3454B096	CONNECTOR (MALE)	2	
P3003	VJP3418B080	CONNECTOR (MALE)	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
Q3001	2SC2295-B	TRANSISTOR	1	
Q3501	2SB709A-R	TRANSISTOR	1	
QR3501	UN2214	TRANSISTOR-RESISTOR	1	
R3101, 02	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	2	
R3103-08	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	6	
R3109	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R3110-13	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	4	
R3114	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R3115	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R3117	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	1	
R3118	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R3120	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R3122	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	1	
R3123, 24	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	2	
R3125-30	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	6	
R3132	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	1	
R3141, 42	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	2	
R3143	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
R3145	ERJ6GEYF123	M. RESISTOR CH 1/10W 12K	1	
R3146, 47	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2	
R3148	ERJ6GEYG273	M. RESISTOR CH 1/10W 27K	1	
R3149	ERJ6GEYG105	M. RESISTOR CH 1/10W 1M	1	
R3150	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R3152, 53	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2	
R3154	ERJ6GEYG223	M. RESISTOR CH 1/10W 22K	1	
R3155	ERJ6GEYG272	M. RESISTOR CH 1/10W 2.7K	1	
R3156	ERJ6GEYG331	M. RESISTOR CH 1/10W 330	1	
R3157	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R3158	ERJ6GEYG105	M. RESISTOR CH 1/10W 1M	1	
R3159	ERJ6GEYJ471	M. RESISTOR CH 1/10W 470	1	
R3160	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	1	
R3161	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
R3162, 63	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2	
R3164	ERJ6GEYG223	M. RESISTOR CH 1/10W 22K	1	
R3165	ERJ6GEYG105	M. RESISTOR CH 1/10W 1M	1	
R3166	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R3167	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R3168, 69	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	2	
R3171-75	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	5	
R3176	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R3177-79	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	3	
R3181, 82	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	2	
R3185-88	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	4	
R3189-92	ERJ6GEYJ471	M. RESISTOR CH 1/10W 470	4	
R3193	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R3195-01	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	7	
R3202	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R3203-06	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	4	
R3211	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R3212-19	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	8	
R3220	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R3221-28	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	8	
R3241-48	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	8	
R3249	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R3250-57	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	8	
R3258	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R3259, 60	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	2	
R3271	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R3272-75	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	4	
R3276-81	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	6	
R3282, 83	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	2	
R3284	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R3285-87	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	3	
R3289-91	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	3	
R3292	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R3294-02	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	9	
R3303-06	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	4	
R3311	ERJ6GEYG223	M. RESISTOR CH 1/10W 22K	1	
R3312-22	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	11	
R3331	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R3332	ERJ6GEYG331	M. RESISTOR CH 1/10W 330	1	
R3333, 34	ERJ6GEYG332	M. RESISTOR CH 1/10W 3.3K	2	
R3335-38	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	4	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R3339-42	ERJ6GEYJ471	M. RESISTOR CH 1/10W 470	4	
R3351	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R3352	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1	
R3353	ERJ6GEYG105	M. RESISTOR CH 1/10W 1M	1	
R3361, 62	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	2	
R3363	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R3364	ERJ6GEYG223	M. RESISTOR CH 1/10W 22K	1	
R3365-69	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	5	
R3370, 71	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2	
R3372-74	ERJ6GEYG273	M. RESISTOR CH 1/10W 27K	3	
R3381	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R3382	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R3383	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R3384-89	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	6	
R3390	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R3393	ERJ6GEYF561	M. RESISTOR CH 1/10W 560	1	
R3394	ERJ6GEYG391	M. RESISTOR CH 1/10W 390	1	
R3397	ERJ6GEYF561	M. RESISTOR CH 1/10W 560	1	
R3398	ERJ6GEYG391	M. RESISTOR CH 1/10W 390	1	
R3399	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R3400	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
R3401	ERJ6GEYF393	M. RESISTOR CH 1/10W 39K	1	
R3404	ERJ6GEYF561	M. RESISTOR CH 1/10W 560	1	
R3405	ERJ6GEYG391	M. RESISTOR CH 1/10W 390	1	
R3411	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R3421	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1	
R3423	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R3432, 33	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	2	
R3434-38	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	3	
R3437	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R3438-53	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	16	
R3455, 56	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	2	
R3461	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R3463, 64	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	2	
R3481	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R3483-88	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	6	
R3491, 92	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	2	
R3495	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R3499	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R3501	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R3502, 03	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	2	
R3504, 05	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	2	
R3506, 07	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	2	
R3508-10	ERJ6RBD472	M. RESISTOR CH 1/10W 4.7K	3	
R3511	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
R3512-14	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	3	
R3515	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
R3517-19	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	3	
R3520	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R3521, 22	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	2	
R3523	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R3524	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
R3525	ERJ6GEYG105	M. RESISTOR CH 1/10W 1M	1	
R3527, 28	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	2	
R3529	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R3530	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	1	
R3531, 32	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2	
R3533	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	1	
R3534	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R3535, 36	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	2	
R3537	ERJ6GEYG105	M. RESISTOR CH 1/10W 1M	1	
R3538	ERJ6GEYG271	M. RESISTOR CH 1/10W 270	1	
R3539, 40	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	2	
R3541, 42	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	2	
R3543	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R3544	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1	
R3545	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R3546	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1	
R3547	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R3548	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1	
R3549	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R3551	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R3552	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R3555, 56	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	2	
R3572-74	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	3	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R3576-94	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	19	
R3597, 98	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	2	
R3601, 02	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	2	
R3603-07	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	5	
R3609, 10	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	2	
R3612, 13	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	2	
R3614	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R3615	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R3616, 17	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	2	
R3618	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
R3621, 22	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	2	
R3623, 24	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	2	
R3625	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1	
R3626	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R3627	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1	
R3628	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R3629	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1	
R3632, 33	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	2	
R3639-49	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	11	
R3651	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R3652, 53	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	2	
R3654, 55	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	2	
R3656, 57	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2	
R3673-75	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	3	
R3701	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R3703	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R3708	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R3709	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R3710	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R3722	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1	
R3725-32	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	8	
R3737-39	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	3	
R3743-46	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	4	
R3747-51	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	5	
R3752	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R3753	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R3754	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R3761, 62	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	2	
R3763-66	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	4	
R3767-74	ERJ6GEYG272	M. RESISTOR CH 1/10W 2.7K	8	
R3775	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R3776	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R3777	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R3781-88	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	8	
R3789-94	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	6	
R3795-09	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	15	
R3811, 12	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	2	
R3816	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R3818	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R3820	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R3824	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R3825-40	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	16	
R3851, 52	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2	
R3853	ERJ6GEYG331	M. RESISTOR CH 1/10W 330	1	
R3854, 55	ERJ6GEYG273	M. RESISTOR CH 1/10W 27K	2	
R3861-66	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	6	
R3869-84	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	16	
R3885	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1	
R3887, 88	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	2	
R3889	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1	
R3890, 91	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	2	
R3892-07	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	16	
R3908	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
SW3101	VSS0367-04TB	SWITCH	1	
SW3102	VSS0367-08	SWITCH	1	
TG3101	VJR0646	TEST POINT	1	
TG3102	EYF6CU	TEST POINT	1	
TG3501	EYF6CU	TEST POINT	1	
TP3101-06	EYF6CU	TEST POINT	6	
TP3108-12	EYF6CU	TEST POINT	5	
TP3113	VJR0646	TEST POINT	1	
TP3114	EYF6CU	TEST POINT	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
TP3501,02	EYF6CU	TEST POINT	2	
TP3601,02	EYF6CU	TEST POINT	2	
VC3001	ECV1ZW50X53T	TRIMMER	1	
VR3101-03	EVMEGSA00B24	V.RESISTOR 20K	3	
X3102	VSX0789	CRYSTAL OSCILLATOR	1	
X3103	VSX0645-B	CRYSTAL OSCILLATOR	1	
X3501	VSX0637-T	CRYSTAL OSCILLATOR	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks

! Warning

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advice non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service manual by anyone else could result in serious injury or death.

Order No. VSD9710SA138
D20

Service Manual

Supplement

Broadcast Product

Subject : Introduction of New Servo P.C. Board

Please use this supplement together with the Service Manual as follows :

Model No.	Bulletin No.	Order No.	Effective from
AJ-D750P	138	VSD9603M202A/B	E7TRC0001
AJ-D650P	68	VSD9611MG01A/B	E7TRA0001
AJ-D640P	68	VSD9611MG01A/B	E7TRA0001

Board : Servo (F1:VEP82105A)

To improve the manufacturing productivity, a new F1 Servo P.C. Board (VEP82105A-3 / VJB82105-2) is introduced. This Supplement Service Manual contains the following items.

1). Parts List (Changed parts only)
2). P.C. Board Layout

F1 Servo (VEP82105A-3 / VJB82105-2)

Part Number

Ref. No.	Original Part No.	New Part No.	Part Name & Descriptions	Pcs	Remarks
C335, 36	---	ECUM1H080DCN	C. CAPACITOR CH 50V 8P	0→2	
C412	ECUM1H103KBN	ECUM1E224ZFN	C. CAPACITOR CH 25V 0.024U	1	
D36	---	MA152K	DIODE	0→1	
IC3	MC14052BF	TC4052BF	IC	1	
IC324	---	T74VHCU04F	IC	0→1	
IC514	NJM78L05UA	XC62AP5002P	IC	1	
R204	VRE0034E332	ERJ6RBD303	M. RESISTOR CH 1/10W 30K	1	
R205	VRE0034E332	ERJ6RBD153	M. RESISTOR CH 1/10W 15K	1	
R223	ERJ6GEY0R00	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R224	ERJ6GEY0R00	---	M. RESISTOR CH 1/10W 0	1→0	
R406, 07	ERJ6GEYJ223	ERJ6GEYG474	M. RESISTOR CH 1/10W 470K	2	
R656	ERDS2TJ101	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	

Panasonic

© 1997 Matsushita Electric Industrial Co., Ltd. All rights reserved.
Unauthorized copying and distribution is a violation of law.

! Warning

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advice non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service manual by anyone else could result in serious injury or death.

Order No. VSD9710SA153
D20

Service Manual

Supplement

Broadcast Product

Subject : Countermeasure for Power Supply OFF

Please use this supplement together with the Service Manual as follows :

Model No.	Bulletin No.	Order No.	Effective from
AJ-D750P	153	VSD9603M202A/B	I7TRC0001
AJ-D650P	80	VSD9611MG01A/B	I7TRA0001
AJ-D640P	80	VSD9611MG01A/B	I7TRA0001

Board : Power 1 (VEP81074A)
Power 2 (VEP81075A)

Symptom : Power may be turned OFF suddenly.

Cause : 1). As the noise may jump into the Power Supply Protection circuit, it may malfunction.
2). Fixing screw of Power 2 Board may be loosened.
3). Noise may appear due to the high impedance between P.C. Board and Head Sink.

Remedy : To prevent the Power OFF, the Power 1 and Power 2 Boards are changed as follows and the following modification is performed.
Power 1 Board (VEP81074A-2/VJB81074-3)
Power 2 Board (VEP81075A-1/VJB81075-1)

*** The unit produced before Serial Number I7TNC**** (AJ-D750) or I7TNA**** (AJ-D650/D640)**

< Power 1 Board >

1). Resistor R1002 is changed from 1/4W, 4.7KΩ to 1/4W, 6.8KΩ on the component side as shown in figures 1 and 3.
2). Resistor R1025 is changed from 1/4W, 10KΩ to 1/4W, 33KΩ on the component side as shown in figures 1 and 3.
3). Resistor R1044 (1/4W, 100KΩ) is removed and new resistor R1044 (1/4W, 68KΩ) and capacitor C1033 (50V/0.082μF) are inserted to the same portion together after the removing portion of old R1044 on the component side as shown in figures 1 and 3.
4). Solders of the screw holes are absorbed on the component side as shown in figure 2.

Part Number					
Ref. No.	Original Part No.	New Part No.	Part Name & Descriptions	Pcs	Remarks
C1033	—	ECQV1H823JL	P. CAPACITOR 50V 0.082U	0→1	
R1002	ERDS2FJ472	ERDS2FJ682	C. RESISTOR 1/4W 6.8K	1	
R1025	ERDS2FJ103	ERDS2FJ333	C. RESISTOR 1/4W 33K	1	
R1044	ERDS2FJ104	ERDS2FJ683	C. RESISTOR 1/4W 68K	1	

104395112

Panasonic

© 1997 Matsushita Electric Industrial Co., Ltd. All rights reserved.
Unauthorized copying and distribution is a violation of law.

< Power 2 Board >

1). Four fixing screws for Heat Sink are changed from XYN3+C8FZS to XYE3+EF8 on the foil side as shown in figure 4.
2). After change of screws, two of them are tightened more and more on the foil side as shown in figures 4.
3). Solder of the screw hole is absorbed on the component side as shown in figure 5.

Part Number					
Ref. No.	Original Part No.	New Part No.	Part Name & Descriptions	Pcs	Remarks
	XYN3+C8FZS	XYE3+EF8	SCREW	4	

< Power Unit >

1). After installing the Power 1 Board, two washers (XWC4BFY) are added to the fixing screws on the component side as shown in figure 6.
2). After installing the two washers to the fixing screws, they are tightened more and more on the component side as shown in figure 6.
3). The fixing screws for Power 2 Board are tightened more and more as shown in figure 8.
4). After installing the Power 2 Board, the insulation sheet (VMZ2503) is changed to transparency type on the component side as shown in figure 7.
5). The fixing screw for Power Box is tightened more and more as shown in figure 9.

Part Number					
Ref. No.	Original Part No.	New Part No.	Part Name & Descriptions	Pcs	Remarks
	— VMZ2503	XWC4BFY VMZ2503	WASHER INSULATION SHEET	0→2 1	

*** The unit produced after Serial Number I7TNC**** (AJ-D750) or I7TNA**** (AJ-D650/D640)**

< Power 1 Board >

1). A new pattern layout P.C. Board (VJB81074-3/VEP81074A-2) is introduced.
2). Resistor R1002 is changed from 1/4W, 4.7KΩ to 1/4W, 6.8KΩ on the component side as shown in figures 1 and 3.
3). Resistor R1025 is changed from 1/4W, 10KΩ to 1/4W, 33KΩ on the component side as shown in figures 1 and 3.
4). Resistor R1044 (1/4W, 100KΩ) is removed and new resistor R1044(1/4W, 68KΩ) and capacitor C1033 (50V/0.082μF) are inserted after the removing portion of old R1044 on the component side as shown in figures 1 and 3.

Part Number					
Ref. No.	Original Part No.	New Part No.	Part Name & Descriptions	Pcs	Remarks
C1033	—	ECQV1H823JL	P. CAPACITOR 50V 0.082U	0→1	
R1002	ERDS2FJ472	ERDS2FJ682	C. RESISTOR 1/4W 6.8K	1	
R1025	ERDS2FJ103	ERDS2FJ333	C. RESISTOR 1/4W 33K	1	
R1044	ERDS2FJ104	ERDS2FJ683	C. RESISTOR 1/4W 68K	1	

< Power 2 Board >

1). A new pattern layout P.C. Board (VJB81075-1/VEP81075A-1) is introduced.
2). Four fixing screws for Heat Sink are changed from XYN3+C8FZS to XYE3+EF8 on the foil side as shown in figure 4.
3). Earth lug is added to the foil side as shown in figure 10.

Part Number					
Ref. No.	Original Part No.	New Part No.	Part Name & Descriptions	Pcs	Remarks
	XYN3+C8FZS —	XYE3+EF8 VEE0C18	SCREW EARTH LUG	4 0→1	

< Power Unit >

1). Insulation Sheet (VMZ2502) is changed to transparency type as shown in figure 6.
2). After installing the Power 1 Board, two washers (XWC4BFY) are added to the fixing screws on the component side as shown in figure 6.
3). After installing the two washers to the fixing screws, they are tightened more and more on the component side as shown in figure 6.

4). The fixing screws for Power 2 Board are tightened more and more as shown in figure 8.
5). After installing the Power 2 Board, the insulation sheet (VMZ2503) is changed to transparency type on the component side as shown in figure 7
6). The fixing screw for Power Box is tightened more and more as shown in figure 9.

Part Number					
Ref. No.	Original Part No.	New Part No.	Part Name & Descriptions	Pcs	Remarks
	---	XWC4BFY	WASHER	0→2	
	VMZ2502	VMZ2502	INSULATION SHEET	1	
	VMZ2503	VMZ2503	INSULATION SHEET	1	

Power 1 Schematic Diagram

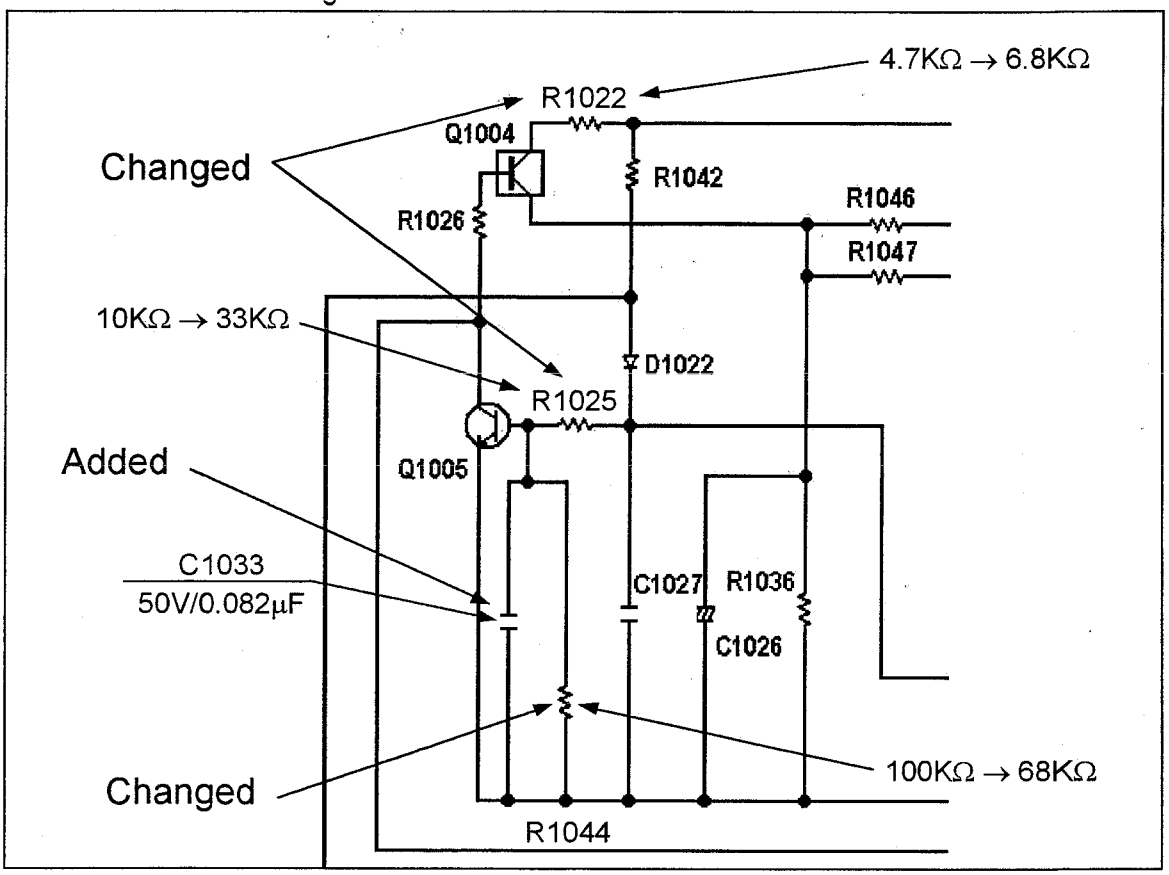


Fig. 1

Power 1 P.C. Board (VEP81074A)

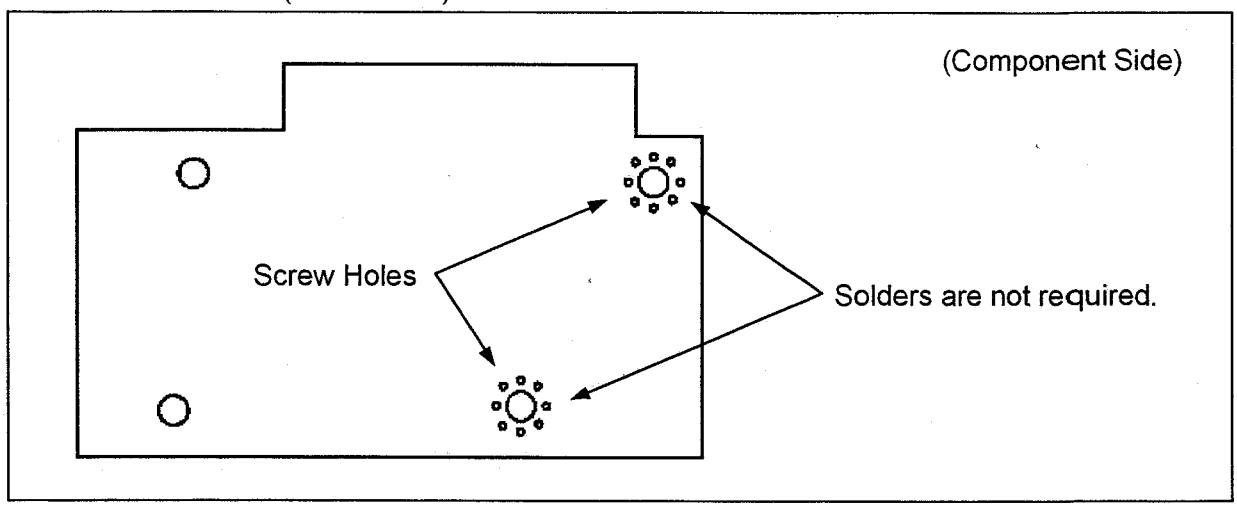


Fig. 2

Power 1 P.C. Board (VEP81074A)

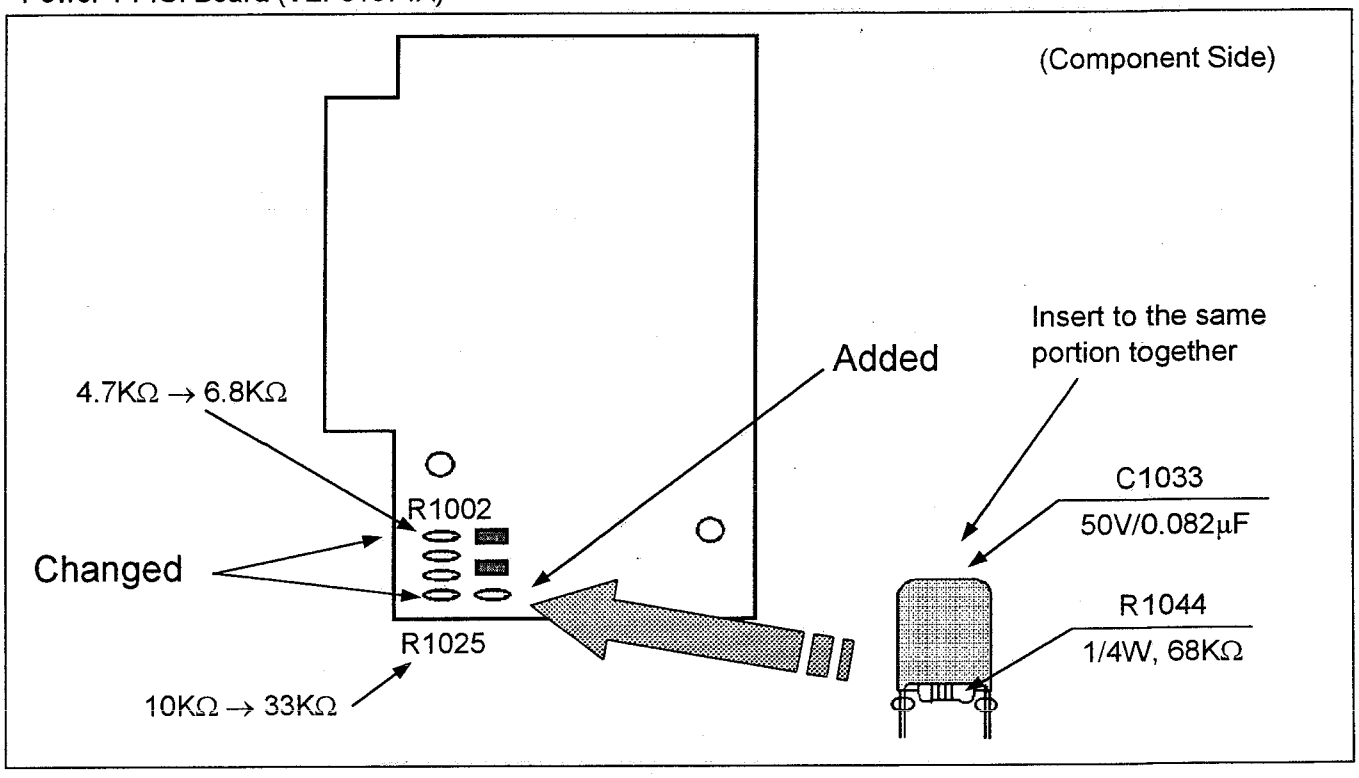


Fig. 3

Power 2 P.C. Board (VEP81075A)

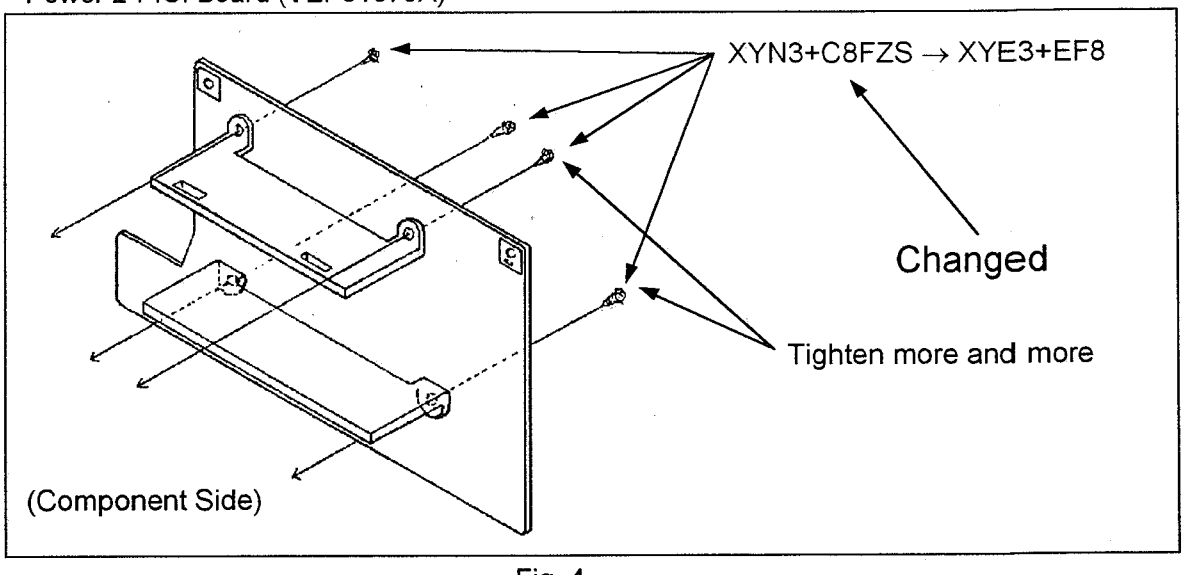


Fig. 4

Power 2 P.C. Board (VEP81075A)

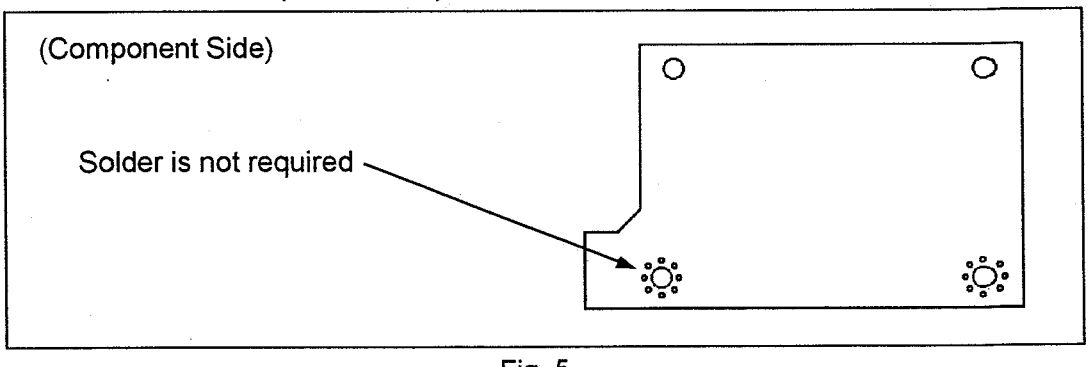


Fig. 5

Power Unit

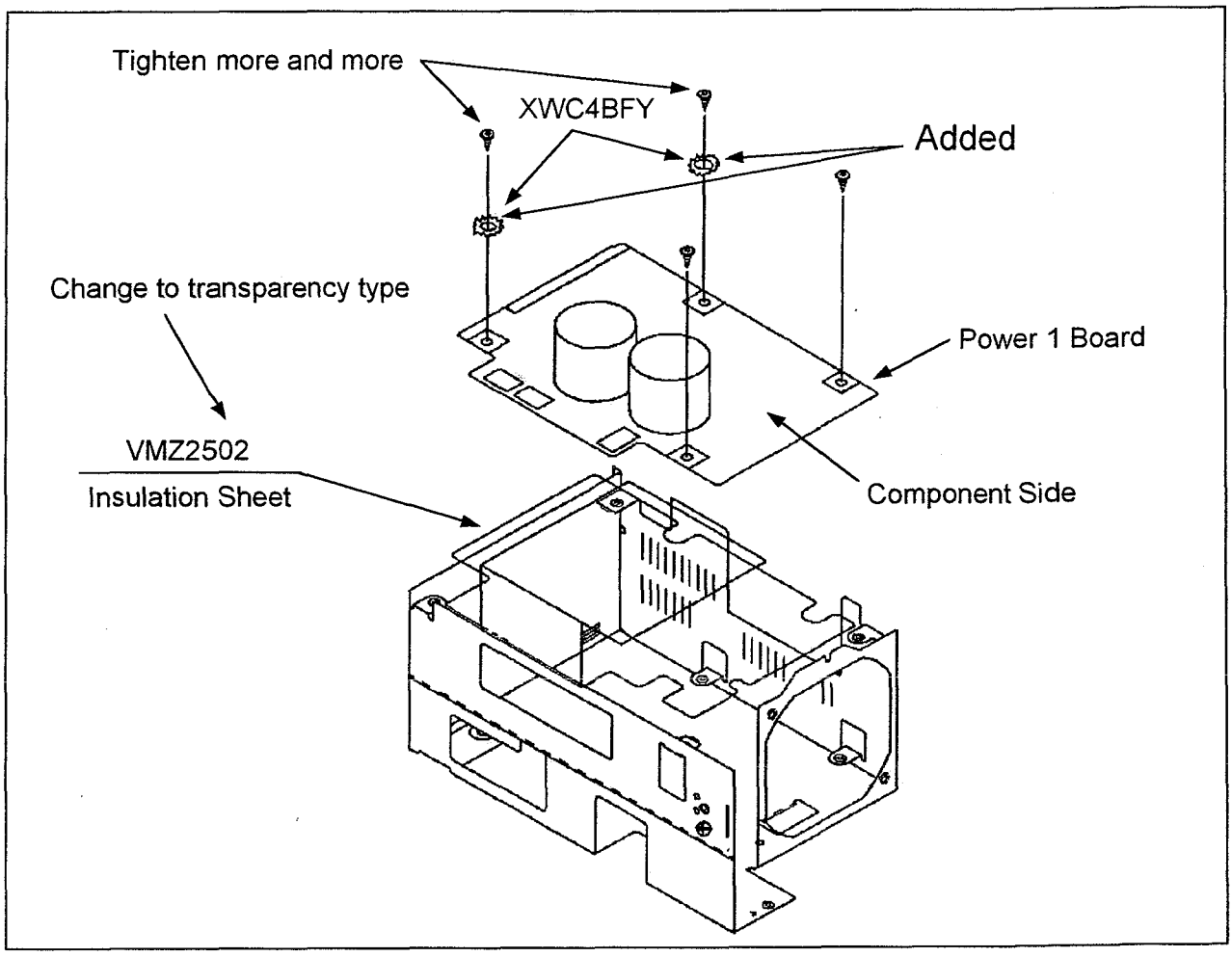


Fig. 6

Power Unit

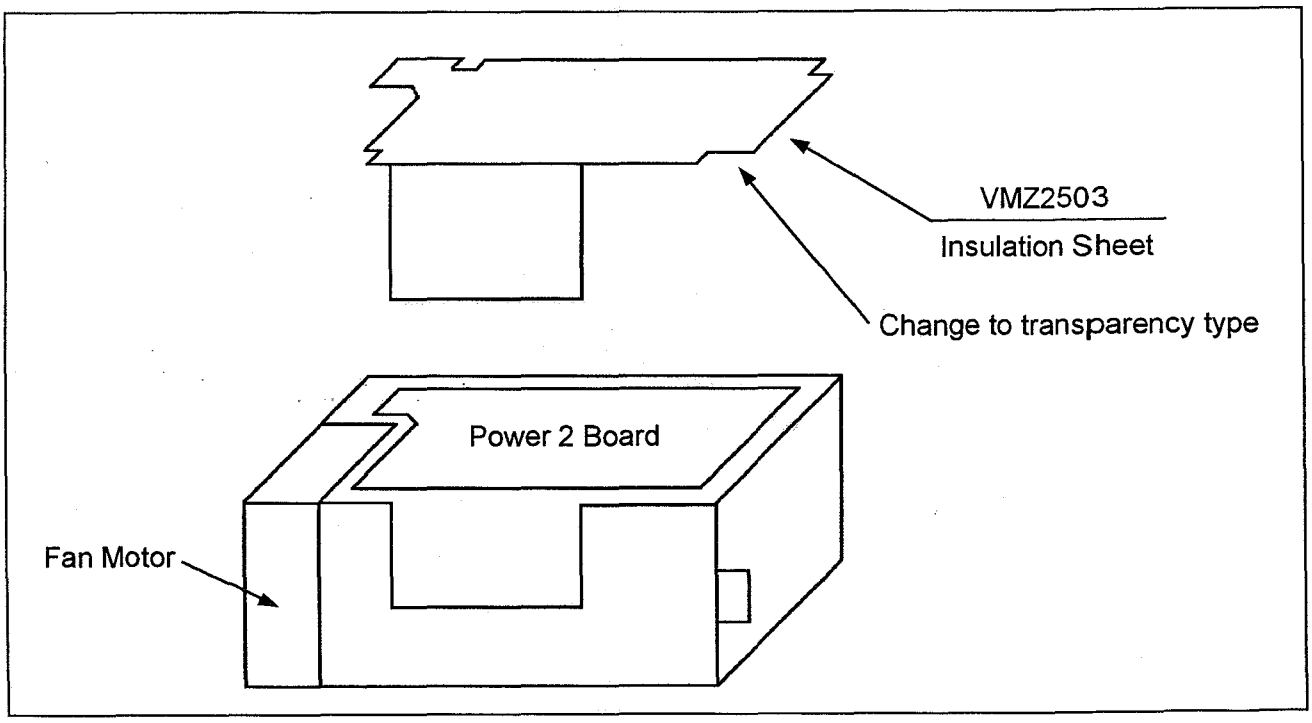


Fig. 7

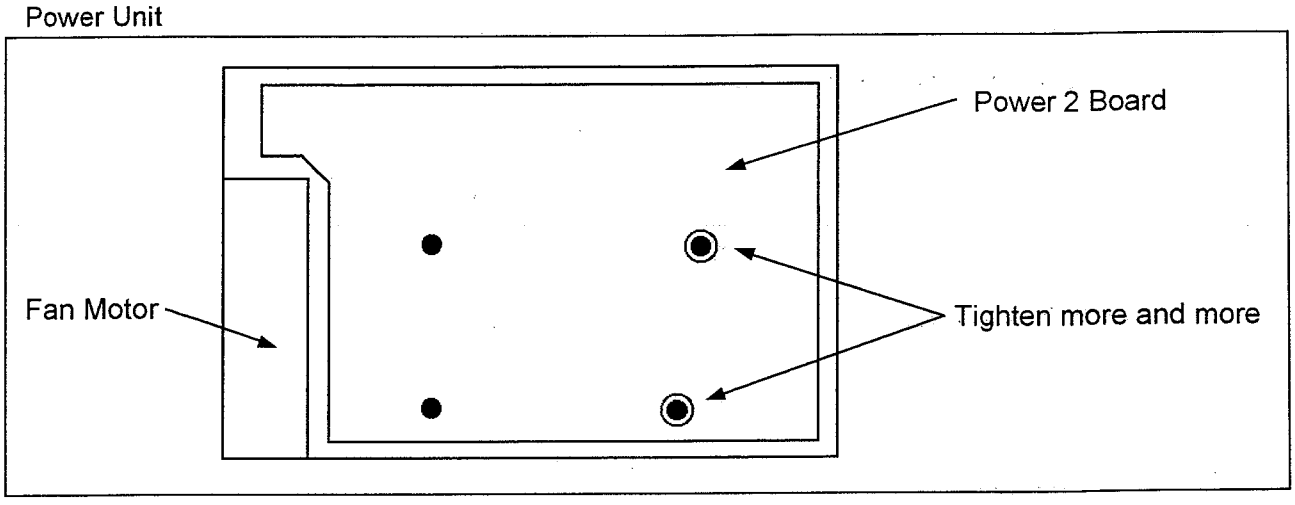


Fig. 8

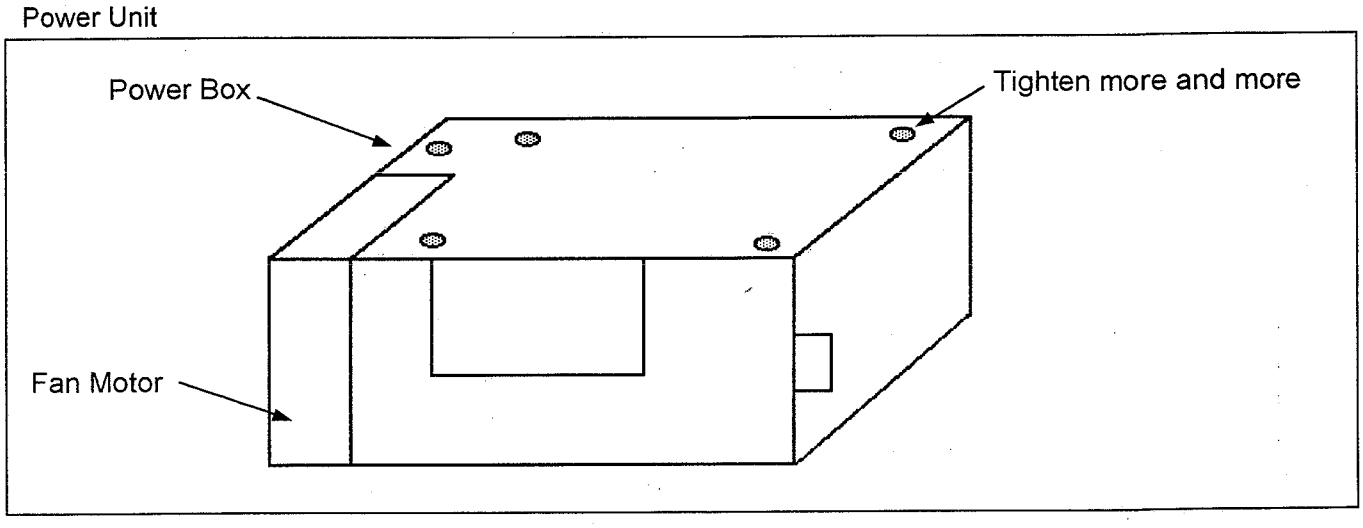


Fig. 9

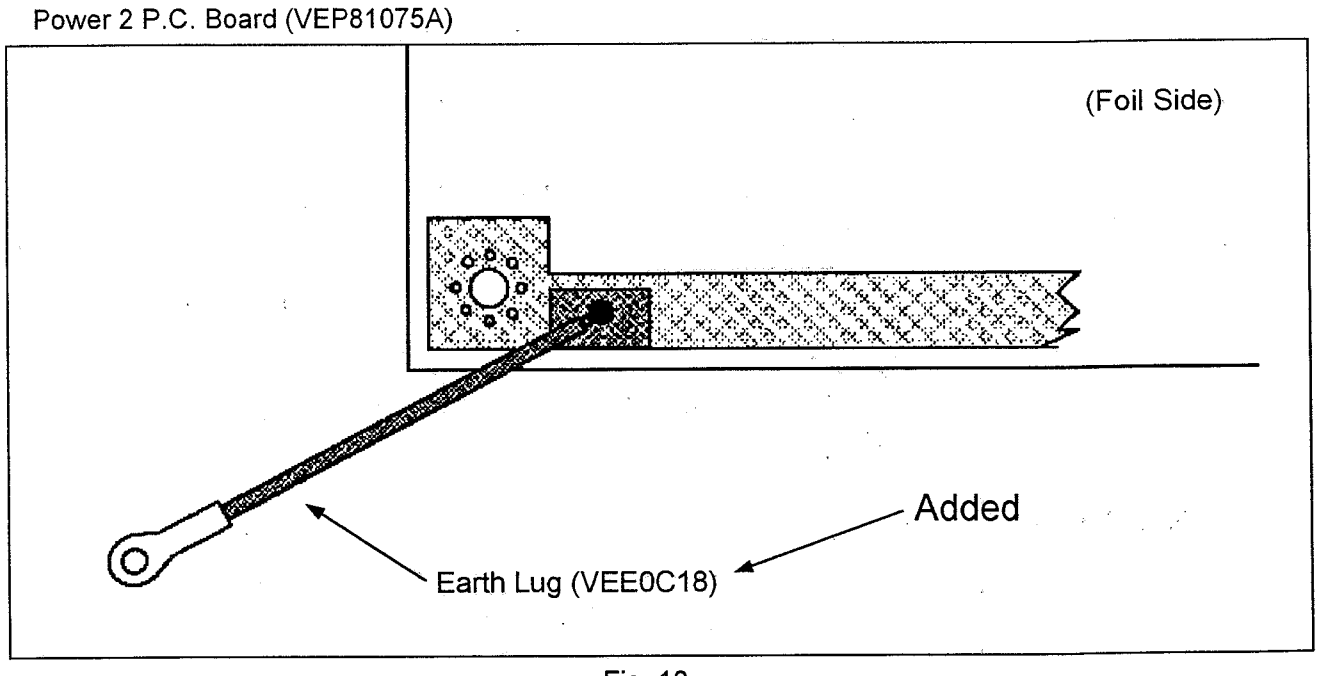


Fig. 10

V23431

5

! Warning

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advice non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service manual by anyone else could result in serious injury or death.

Order No. VSD9710SC028
D20

Service Manual

Supplement

Broadcast Product

Subject : Introduction of New V OUT P.C. Board

Please use this supplement together with the Service Manual as follows :

Model No.	Bulletin No.	Order No.	Effective from
AJ-D650P	77	VSD9611MG01A/B	H7TRA0001
AJ-D640P	77	VSD9611MG01A/B	H7TRA0001

Board : V OUT (F4:VEP83352C)

To improve the manufacturing productivity and introduce the new function, a new F4 V OUT P.C. Board (VEP83352C / VJB83352-2) is introduced. This Supplement Service Manual contains the following items.

1). Electrical Adjustment Procedure
2). Parts List
3). Schematic Diagram
4). P.C. Board Layout

According to this change, the following functions are introduced.
1). SET_UP Add/Through function is introduced. To execute SET_UP Add/Through function, AV PROM must be up-graded more than N1.02. (Refer to the Supplement Service Manual No. VSD9705SC018-1)
2). V Blanking Area Record function is introduced.

104005093105065133

Panasonic

© 1997 Matsushita Electric Industrial Co., Ltd. All rights reserved.
Unauthorized copying and distribution is a violation of law.

10. Video Out P.C.Board (F4)

10-1. DA Reference Volt. Adjustment

BOARD	V_OUT (F4)
SPEC.	3.95V ± 0.05V
TEST	TP300 (H-3)
ADJUST	VR300 (G-1)
INPUT	EXT REF IN / Composite
MODE	SET UP MENU
TAPE	----------
M.EQ	Oscilloscope

1. Open the set up menu and set the menu as follows.

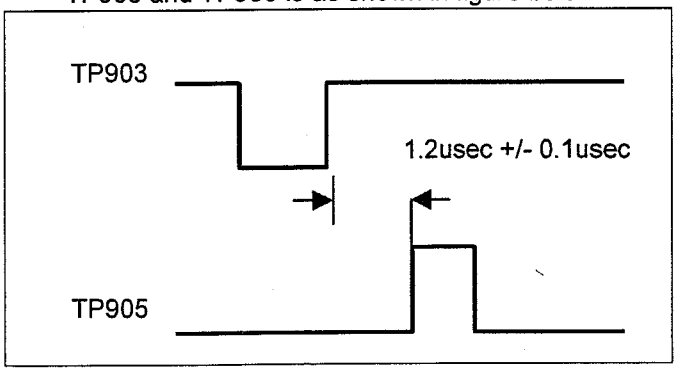
   613 V IN SETUP THRU
   614 V OUT SETUP THRU

2. Adjust VR300 so that the DV voltage is 3.95V ± 0.05V .

10-2. Sampling Position Adjustment

BOARD	V_OUT (F4)
SPEC.	1.2usec ± 0.1 usec
TEST	TP903 (D-1), TP905 (C-2)
ADJUST	VR900 (C-1)
INPUT	EXT REF IN / Composite
MODE	EE
TAPE	----------
M.EQ	Oscilloscope

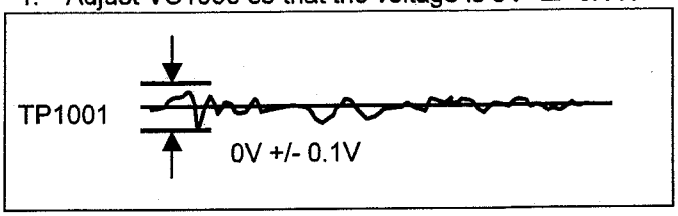
1. Adjust VR900 so that the timing of the pulses at TP905 and TP903 is as shown in figure below.



10-3. PLL Center Adjustment

BOARD	V_OUT (F4)
SPEC.	0V ± 0.1V
TEST	TP1001 (D-1)
ADJUST	VC1000 (D-2)
INPUT	EXT REF IN / Composite
MODE	EE
TAPE	----------
M.EQ	Oscilloscope

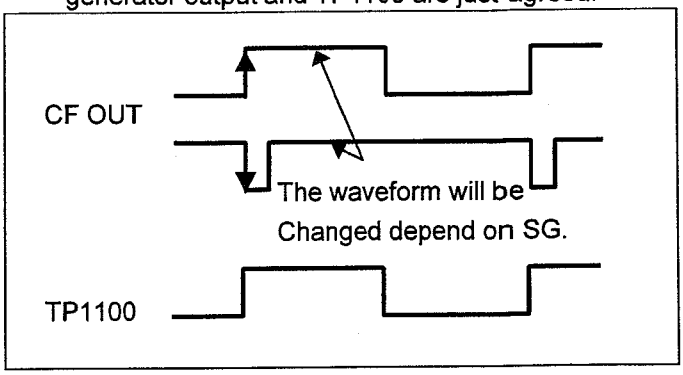
1. Adjust VC1000 so that the voltage is 0V ± 0.1V.



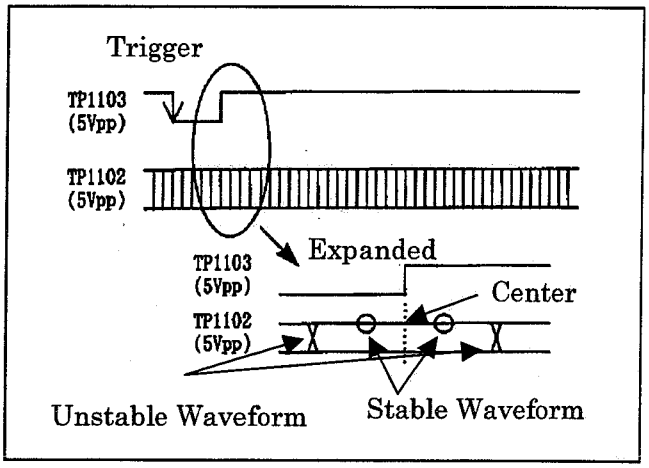
10-4. CF Detection (1) Adjustment

BOARD	V_OUT (F4)
SPEC.	See Figure
TEST	TP1100 (C-2), CF Out of Signal SG TP1102 (C-2), TP1103 (C-2)
ADJUST	VR901 (C-1)
INPUT	EXT REF IN / Composite
MODE	EE
TAPE	----------
M.EQ	Oscilloscope

1. Connect the oscilloscope CH1 to the CF output of Composite signal generator and CH2 to TP1100.
2. Adjust VR901 so that the CF pulses of the signal generator output and TP1100 are just agreed.



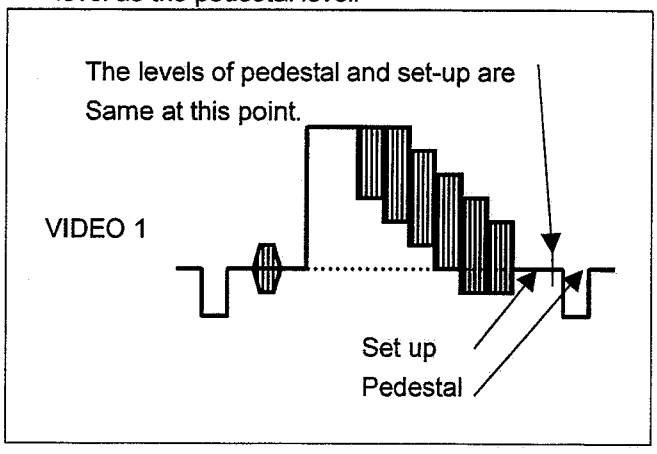
3. Connect the oscilloscope CH1 to TP1102 and CH2 toTP1103.
4. Expand (delay) the portion A (rising edge of TP1103).
5. Slowly and slithery rotate VR901 so that the rising edge of TP1103 is positioned at the center of the stable waveform at TP1102.



10-5. Composite Set Up Adjustment

BOARD	V_OUT (F4)
SPEC.	Within ± 1 IRE
TEST	VIDEO-1
ADJUST	VR802 (J-2)
INPUT	----------
MODE	PLAY
TAPE	VFM3580KM (Color Bar)
M.EQ	WFM Monitor

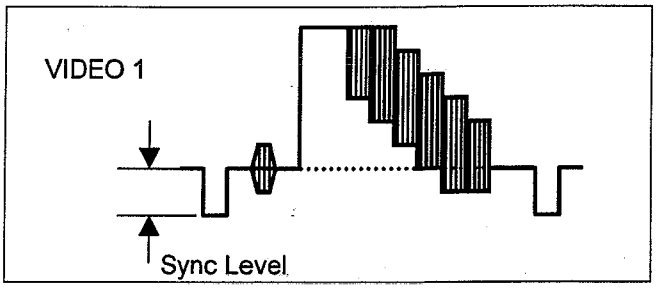
1. Adjusts VR802 so that the set up level is the same level as the pedestal level.



10-6. Sync Level Adjustment

BOARD	V_OUT (F4)
SPEC.	0.3V ± 1%
TEST	VIDEO-1
ADJUST	VR950 (F-1)
INPUT	----------
MODE	PLAY
TAPE	VFM3580KM (Color Bar)
M.EQ	WFM Monitor

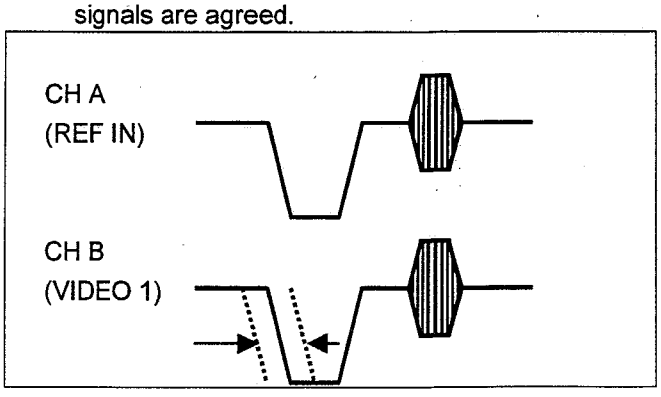
1. Adjust VR950 so that the Sync Level is 0.3V ± 1%.



10-7. H Sync Phase Adjustment

BOARD	V_OUT (F4)
SPEC.	See Figure
TEST	VIDEO-1 / REF
ADJUST	VR1100 (B-1)
INPUT	EXT REF IN
MODE	PLAY
TAPE	VFM3580KM (Color Bar)
M.EQ	WFM Monitor

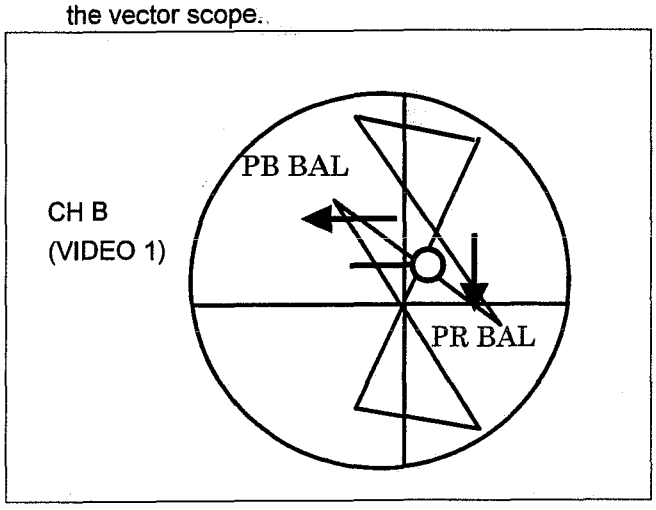
1. Adjusts VR1100 while changing the channels A and B of the waveform monitor alternately so that the timing of the Video 1 H and Reference H signals are agreed.



10-8. Carrier Balance Adjustment

BOARD	V_OUT (F4)
SPEC.	Cross Point "A" at the Center
TEST	VIDEO-1 / REF IN
ADJUST	VR505 (I-1), VR506 (I-1)
INPUT	EXT REF IN
MODE	PLAY
TAPE	VFM3580KM (Color Bar)
M.EQ	Vector Scope

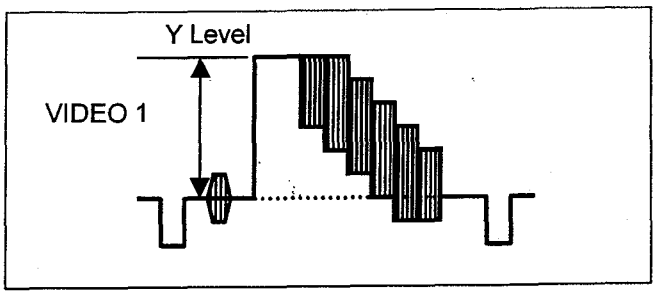
1. Set the vector scope in the without set up mode.
2. Adjust VR505 (PB BAL) and VR506 (PR BAL) so that the cross point A is positioned at the center of the vector scope.



10-9. Composite Y Level Adjustment

BOARD	V_OUT (F4)
SPEC.	100 IRE ± 1%
TEST	VIDEO-1
ADJUST	VR800 (I-1)
INPUT	----------
MODE	PLAY
TAPE	VFM3580KM (Color Bar)
M.EQ	WFM Monitor

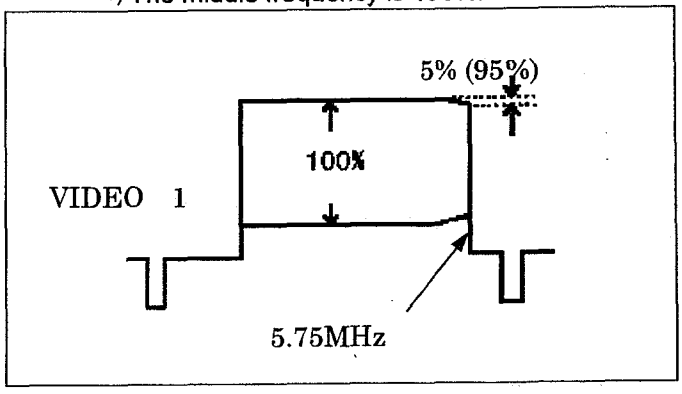
1. Adjust VR800 so that the Y Level is 100 IRE ± 1%.



10-10. Composite Y Frequency Response Adjustment

BOARD	V_OUT (F4)
SPEC.	1MHz : 5.5MHz = 100 : 95%
TEST	Y out
ADJUST	VR901 (G-1)
INPUT	----------
MODE	PLAY
TAPE	VFM3580KM (H Sweep)
M.EQ	WFM Monitor

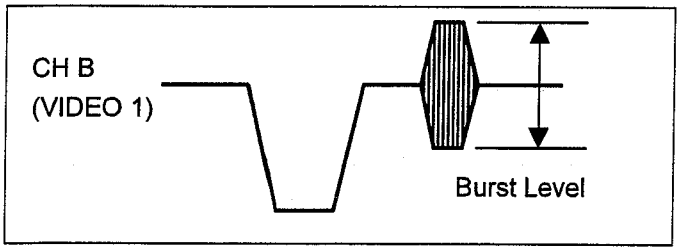
1. Adjust VR901 so that the frequency response becomes flat.
   a) The level of 5.5MHz portion is 95%.
   b) The middle frequency is 100%.



10-11. Burst Level Adjustment

BOARD	V_OUT (F4)
SPEC.	40 IRE ± 1%
TEST	VIDEO-1
ADJUST	VR503 (H-1)
INPUT	----------
MODE	PLAY
TAPE	VFM3580KM (Color Bar)
M.EQ	WFM Monitor

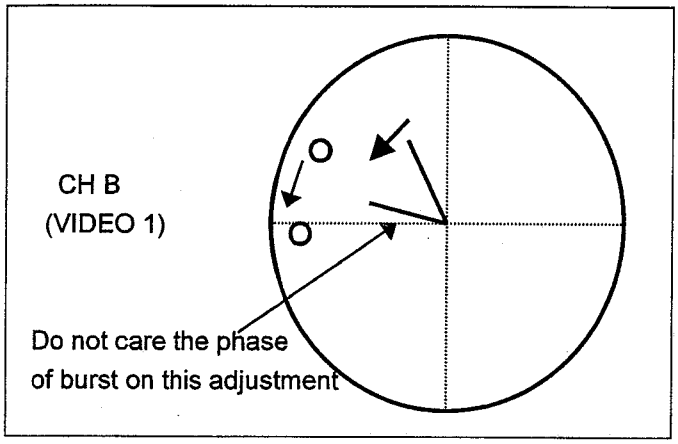
1. Adjust VR503 so that the Burst Level is 40 IRE ± 1%.



10-12. Sub-Carrier Phase Adjustment

BOARD	V_OUT (F4)
SPEC.	0 ± 1°
TEST	VIDEO-1 / REF IN
ADJUST	VR1000 (B-1)
INPUT	EXT REF IN
MODE	PLAY
TAPE	VFM3580KM (Color Bar)
M.EQ	SCH Meter

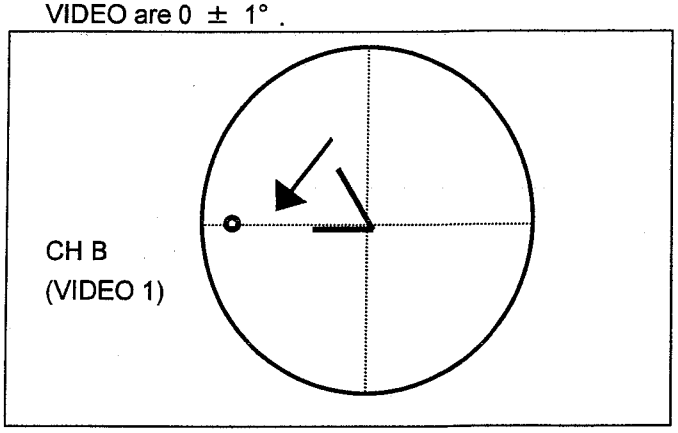
1. Adjust VR1000 so that the SCH of VIDEO OUT is same as EXT-REF-IN.



10-13. Burst Phase Adjustment

BOARD	V_OUT (F4)
SPEC.	0 ± 1°
TEST	VIDEO-1
ADJUST	VR902 (B-1)
INPUT	EXT REF IN
MODE	PLAY
TAPE	VFM3580KM (Color Bar)
M.EQ	SCH Meter

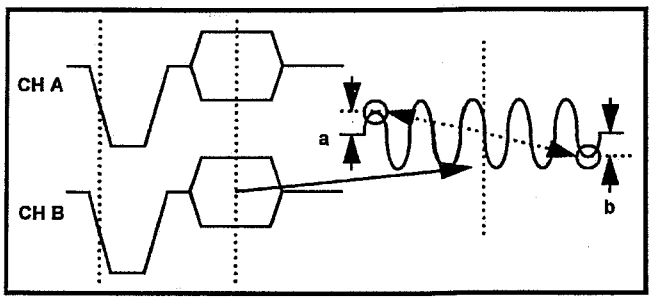
1. Adjust VR902 so that the burst phases of REF IN and VIDEO are 0 ± 1° .



10-14. Burst Position Adjustment

BOARD	V_OUT (F4)
SPEC.	A Level difference : within 5mV
TEST	VIDEO-1 / REF IN
ADJUST	VR1102 (B-1)
INPUT	EXT REF IN
MODE	PLAY
TAPE	VFM3580KM (Color Bar)
M.EQ	WFM Monitor

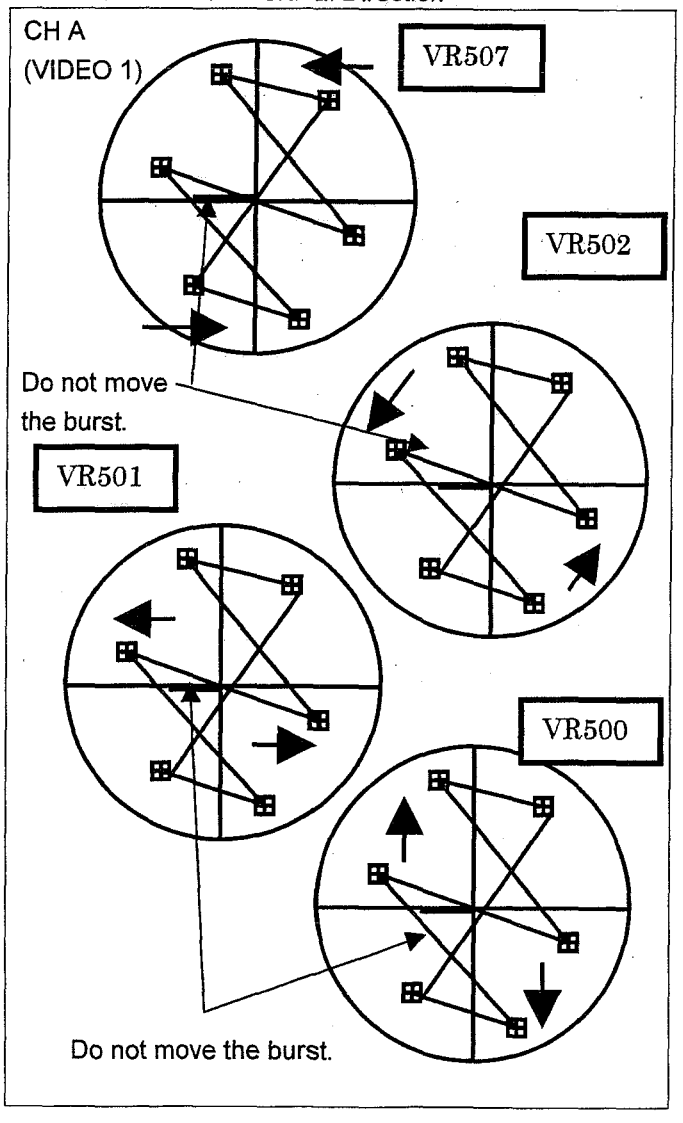
1. Adjusts VR1102 while changing the channels A and B of the vector scope alternately so that the timing of the burst signal against the H sync channel A and B are agreed.



10-15. Vector Adjustment

BOARD	V_OUT (F4)
SPEC.	All Vectors are in the Inner Boxes
TEST	VIDEO-1
ADJUST	VR507 (I-1), VR502 (H-1), VR501 (H-1), VR500 (H-1)
INPUT	----------
MODE	PLAY
TAPE	VFM3580KM (75% Color Bar)
M.EQ	Vector Scope

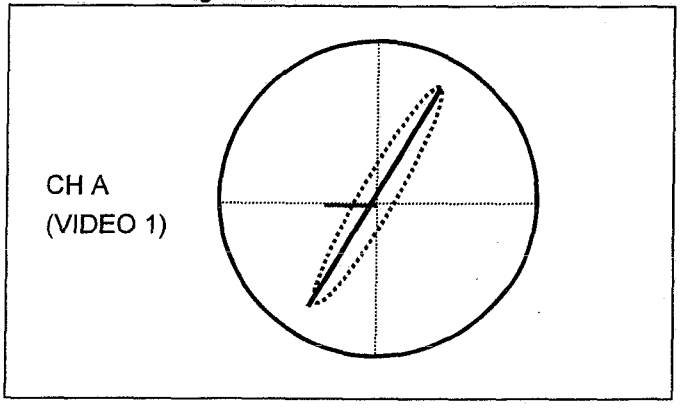
1. Set the burst position on the Vector Scope at correct position.
2. Adjust VR507, VR502 VR501 and VR500 so that the color bar's each vector points are in the square mark on the vector scope.
   - VR507 : Diagonal Direction
   - VR502 : Rotary Direction
   - VR501 : Horizontal Direction
   - VR500 : Vertical Direction



10-16. Composite PB/PR Timing Adjustment

BOARD	V_OUT (F4)
SPEC.	0 ± 10nsec
TEST	VIDEO-1
ADJUST	VR307 (F-1)
INPUT	----------
MODE	PLAY
TAPE	VFM3580KM (Color Bar)
M.EQ	Vector Scope

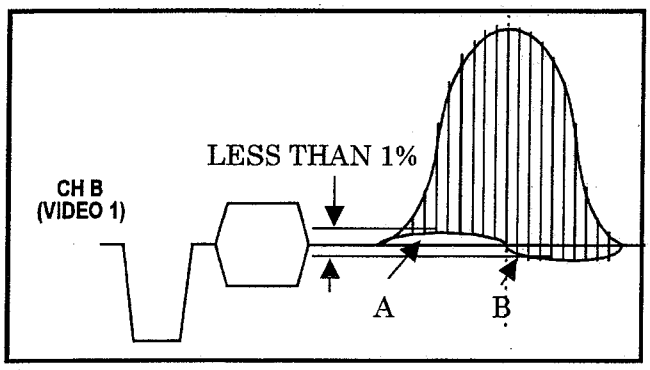
1. Adjust VR307 so that the signal on the vector scope becomes single line .



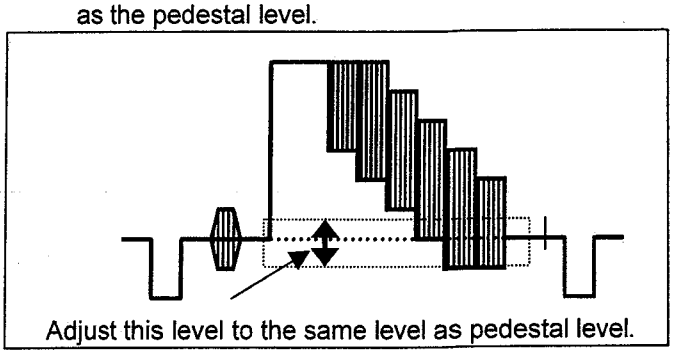
10-17. Composite YC Timing Adjustment

BOARD	V_OUT (F4)
SPEC.	0 ± 10nsec (Less than 1%)
TEST	VIDEO-1
ADJUST	VR803 (I-1)
INPUT	----------
MODE	PLAY
TAPE	VFM3580KM (12.5T Pulse)
M.EQ	Monitor

1. Do not use extension board for this adjustment.
2. Adjust VR803 so that the levels (A) and (B) on the 12.5T pulse are equal or less than 1%.
3. When performing this adjustment (step 2) the level may be changed too. Therefore, adjust the Chroma Level Control at the front panel.
4. Set the Chroma Level Control as the previous position.



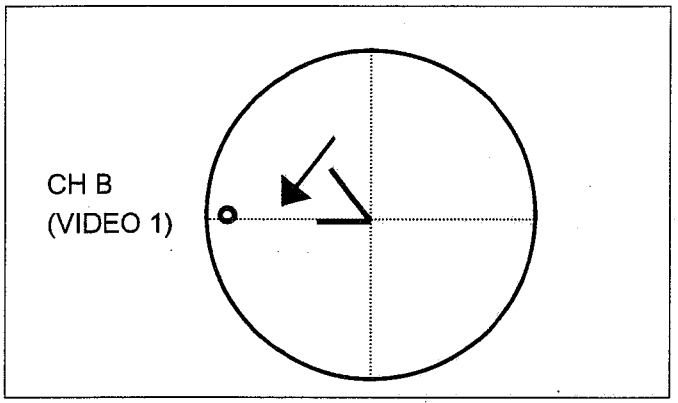
1. Adjust VR310 so that the signal level is same level as the pedestal level.



10-18. Burst Phase Adjustment

BOARD	V_OUT (F4)
SPEC.	0 ± 1°
TEST	VIDEO-1
ADJUST	VR902 (B-1)
INPUT	EXT REF IN
MODE	PLAY
TAPE	VFM3580KM (Color Bar)
M.EQ	SCH Meter

1. Adjust VR902 so that the burst phases of REF IN and VIDEO are 0 ± 1° .



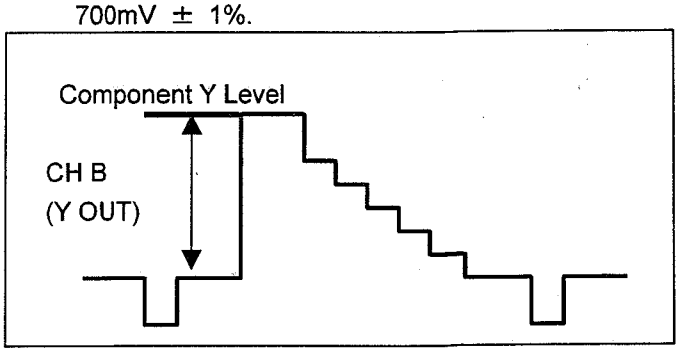
10-19. V Blank Pedestal Level Adjustment

BOARD	V_OUT (F4)
SPEC.	0 ± 10nsec
TEST	VIDEO-1
ADJUST	VR310 (F-1)
INPUT	----------
MODE	PLAY
TAPE	VFM3580KM (Color Bar)
M.EQ	WFM Monitor

10-20. Component Y Level Adjustment

BOARD	V_OUT (F4)
SPEC.	700mV ± 1%
TEST	Y_OUT
ADJUST	VR301 (F-1)
INPUT	----------
MODE	PLAY
TAPE	VFM3580KM (Color Bar)
M.EQ	WFM Scope

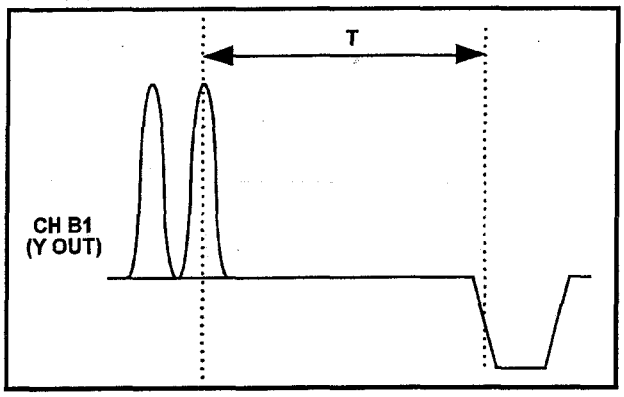
1. Confirm the SW400 on the F4 Board is at the M2 side.
2. Adjust VR301 so that the component Y Level is 700mV ± 1%.



10-21. Video Phase Adjustment

BOARD	V_OUT
SPEC.	T = 1.26usec ± 0.02usec
TEST	Y_OUT
ADJUST	VR1050 (A-1)
INPUT	----------
MODE	PLAY
TAPE	VFM3580KM (Aria Maker)
M.EQ	WFM Monitor

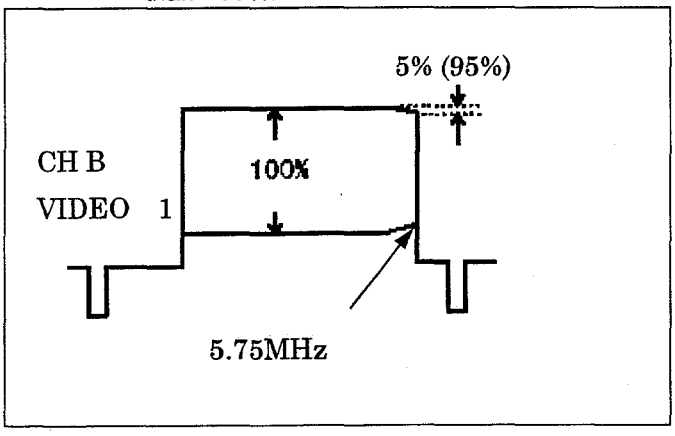
1. Adjust VR1050 so that the timing T is 1.26usec ± 0.02usec.



10-22. Component Y Frequency Response Adjustment

BOARD	V_OUT (F4)
SPEC.	1MHz : 5.5MHz = 100% : 95%
TEST	Y out
ADJUST	VR304 (F-1)
INPUT	----------
MODE	PLAY
TAPE	VFM3580KM (H Sweep)
M.EQ	WFM Monitor

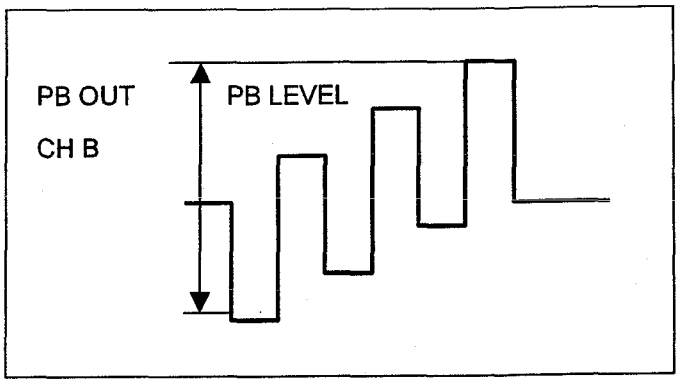
1. Adjust VR304 so that the frequency response becomes flat.
   a) The level of 5.5MHz portion is 95%.
   b) The middle frequency should not be more than 100%.



10-23. Component PB Level Adjustment

Board	V_OUT (F4)
SPEC.	700mV ± 1%
TEST	PB_OUT
ADJUST	VR306 (E-1)
INPUT	----------
MODE	PLAY
TAPE	VFM3580KM (100% Color Bar)
M.EQ	WFM Monitor

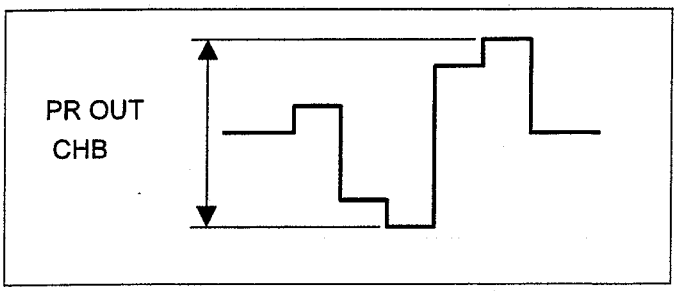
1. Confirm the SW400 on the F4 Board is at M2 side.
2. Adjust VR306 so that the PB Level of component out is 700mV ± 1%.



10-24. Component PR Level Adjustment

BOARD	V_OUT (F4)
SPEC.	700mV ± 1%
TEST	PR_OUT
ADJUST	VR305 (E-1)
INPUT	----------
MODE	PLAY
TAPE	VFM3580KM (100% Color Bar)
M.EQ	WFM Monitor

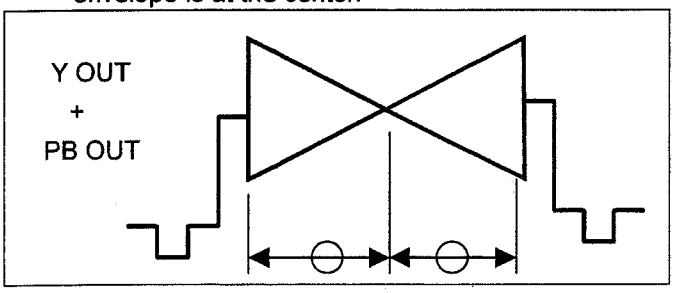
1. Confirm the SW400 on the F4 Board is at M2 side.
2. Adjust VR305 so that the PR Level of component out is 700mV ± 1%.



10-25. Component Y/PB Timing Adjustment

BOARD	V_OUT (F4)
SPEC.	0 ± 10nsec
TEST	Y_OUT, PB_OUT
ADJUST	VR303 (E-1)
INPUT	----------
MODE	PLAY
TAPE	VFM3580KM (Bowtie)
M.EQ	WFM Monitor

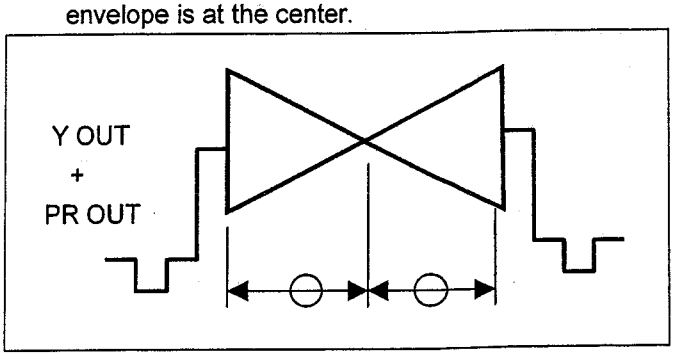
1. Set the WFM monitor in the YC timing measuring mode (CH B1 + CH B2).
2. Adjust VR303 so that the cross point of the envelope is at the center.



10-26. Component Y/PR Timing Adjustment

BOARD	V_OUT (F4)
SPEC.	0 ± 10nsec
TEST	Y_OUT, PR_OUT
ADJUST	VR302 (E-1)
INPUT	----------
MODE	PLAY
TAPE	VFM3580KM (Bowtie)
M.EQ	WFM Monitor

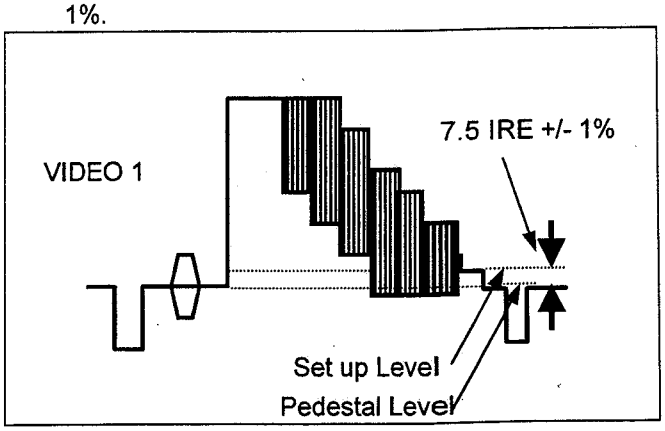
1. Set the WFM monitor in the YC timing measuring mode (CH B1 + CH B2).
2. Adjust VR302 so that the cross point of the envelope is at the center.



10-27. Composite Set Up Adjustment (In Set-up Mode)

BOARD	V_OUT (F4)
SPEC.	Within ± 1 IRE
TEST	VIDEO-1
ADJUST	VR805 (I-3)
INPUT	----------
MODE	PLAY
TAPE	VFM3580KM (Color Bar)
M.EQ	WFM Monitor

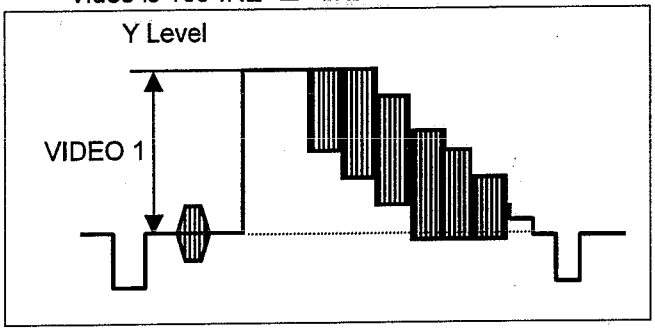
1. Set the on-screen menu as shown below.
   613 V IN SETUP THRU
   614 V IN SETUP ADD
2. Adjust VR805 so that the set up level 7.5 IRE ± 1%.

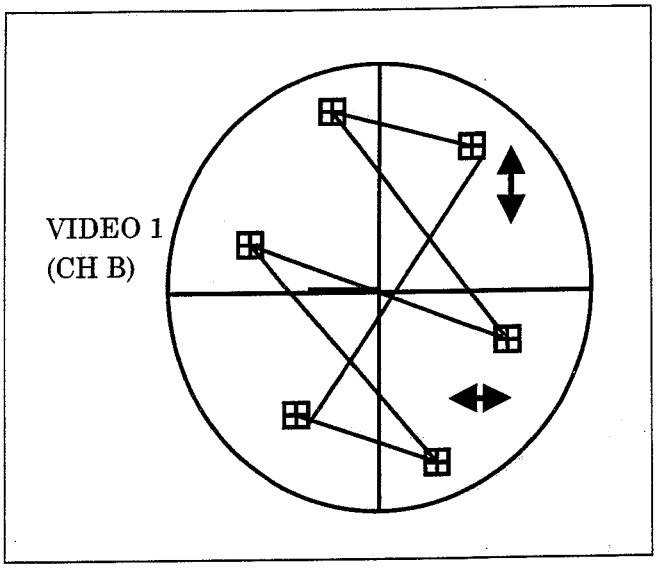


10-28. Composite Y Level Adjustment
(In Set-up Mode)

BOARD	V_OUT (F4)
SPEC.	100 IRE ± 1%
TEST	VIDEO-1
ADJUST	VR804 (J-3)
INPUT	----------
MODE	PLAY
TAPE	VFM3580KM (100% Color Bar)
M.EQ	WFM Monitor

1. Set the on-screen menu as shown below.
   613 V IN SETUP THRU
   614 V IN SETUP ADD
2. Adjust VR804 so that the Y Level of composite Video is 100 IRE ± 1%.





10-29. Vector Adjustment
(In Set-up Mode)

BOARD	V_OUT (F4)
SPEC.	All Vectors are in the Inner Boxes
TEST	VIDEO-1
ADJUST	VR508 (H-1), VR509 (H-1),
INPUT	----------
MODE	PLAY
TAPE	VFM3580KM (75% Color Bar)
M.EQ	Vector Scope

1. Set the on-screen menu as shown below.
   613 V IN SETUP THRU
   614 V IN SETUP ADD
2. Set the burst position on the Vector Scope at correct position.
3. Adjust VR508 and VR509 so that the color bar's each vector points are in the square mark on the vector scope.
   VR508 : PR Level
   VR509 : PB Level

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
■	VEP83352C	F4 V-OUT P.C.BOARD	1	(RTL)
C100	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1	
C101	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C102	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1	
C103	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C150-60	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	11	
C200-03	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	4	
C250, 51	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	2	
C252	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C253-57	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	5	
C258	ECUX1H151JCV	C. CAPACITOR CH 50V 150P	1	
C261	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C263	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C265	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C267	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C300-02	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	3	
C303	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C304	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C305	ECEV0JV101Q	E. CAPACITOR CH6.3V 100U	1	
C306, 07	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	2	
C308	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C309, 10	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	2	
C311	ECEV1HV2R2Q	E. CAPACITOR CH 50V 2.2U	1	
C312	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C313	ECEV1HV2R2Q	E. CAPACITOR CH 50V 2.2U	1	
C314-16	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	3	
C317	ECEV1HV2R2Q	E. CAPACITOR CH 50V 2.2U	1	
C318-23	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	6	
C324	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C325, 26	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	2	
C327	ECUX1H120JCV	C. CAPACITOR CH 50V 12P	1	
C328	ECUX1H560JCV	C. CAPACITOR CH 50V 56P	1	
C329, 30	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	2	
C331	ECUX1H120JCV	C. CAPACITOR CH 50V 12P	1	
C332	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C333	ECUX1H560JCV	C. CAPACITOR CH 50V 56P	1	
C334, 35	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	2	
C336, 37	ECUX1H390JCV	C. CAPACITOR CH 50V 39P	2	
C338	ECUX1H100DCV	C. CAPACITOR CH 50V 10P	1	
C339	ECUX1H680JCV	C. CAPACITOR CH 50V 68P	1	
C340	ECUX1H151JCV	C. CAPACITOR CH 50V 150P	1	
C342	ECUX1H100DCV	C. CAPACITOR CH 50V 10P	1	
C343	ECUX1H680JCV	C. CAPACITOR CH 50V 68P	1	
C344	ECUX1H151JCV	C. CAPACITOR CH 50V 150P	1	
C346	ECUX1H020CCV	C. CAPACITOR CH 50V 2P	1	
C347	ECUX1H121JCV	C. CAPACITOR CH 50V 120P	1	
C348, 49	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	2	
C350	ECUX1H560JCV	C. CAPACITOR CH 50V 56P	1	
C351	ECUX1H470JCV	C. CAPACITOR CH 50V 47P	1	
C352-66	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	15	
C370, 71	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	2	
C372	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C373	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C374	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C375	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C376	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C377	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C378	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C400	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C401	ECUX1H470JCV	C. CAPACITOR CH 50V 47P	1	
C402-04	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	3	
C405	ECUX1H180JCV	C. CAPACITOR CH 50V 18P	1	
C406	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C407	ECUX1H121JCV	C. CAPACITOR CH 50V 120P	1	
C408	ECUX1H120JCV	C. CAPACITOR CH 50V 12P	1	
C409, 10	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	2	
C412, 13	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	2	
C415	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C425	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C500	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C501	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C502	ECUX1H221JCV	C. CAPACITOR CH 50V 220P	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C503	ECUX1H821JV	C. CAPACITOR CH 50V 820P	1	
C504	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C505	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C506, 07	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	2	
C508	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C509	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C510, 11	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	2	
C512	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1	
C513-15	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	3	
C516	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	1	
C517	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C518	ECUX1H100DCV	C. CAPACITOR CH 50V 10P	1	
C519-21	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	3	
C522	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	1	
C523-25	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	3	
C526	ECUX1H271JCV	C. CAPACITOR CH 50V 270P	1	
C527	ECUX1H151JCV	C. CAPACITOR CH 50V 150P	1	
C528	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C529	ECUX1H820JCV	C. CAPACITOR CH 50V 82P	1	
C530-33	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	4	
C534	ECUX1H820JCV	C. CAPACITOR CH 50V 82P	1	
C535-38	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	4	
C539	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	1	
C541	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C542	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	1	
C545	ECUX1H330JCV	C. CAPACITOR CH 50V 33P	1	
C546	ECUX1H271JCV	C. CAPACITOR CH 50V 270P	1	
C547	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	1	
C548	ECUX1H680JCV	C. CAPACITOR CH 50V 68P	1	
C549	ECUX1H070DCV	C. CAPACITOR CH 50V 7P	1	
C550	ECUX1H121JCV	C. CAPACITOR CH 50V 120P	1	
C551	ECUX1C473KBV	C. CAPACITOR CH 16V 0.047U	1	
C552	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C553	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C554	ECUX1C473KBV	C. CAPACITOR CH 16V 0.047U	1	
C555	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C556	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C557	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C558	ECUX1C473KBV	C. CAPACITOR CH 16V 0.047U	1	
C559, 60	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	2	
C561, 62	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	2	
C566	ECUX1H100DCV	C. CAPACITOR CH 50V 10P	1	
C568, 69	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	2	
C570	ECEV0JV470Q	E. CAPACITOR CH6.3V 47U	1	
C571	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C572	ECEV0JV470Q	E. CAPACITOR CH6.3V 47U	1	
C573-78	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	6	
C600-06	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	7	
C700-03	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	4	
C705	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C800, 01	ECUX1H470JCV	C. CAPACITOR CH 50V 47P	2	
C802	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C803, 04	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	2	
C805	ECUX1H020CCV	C. CAPACITOR CH 50V 2P	1	
C806	ECUX1H121JCV	C. CAPACITOR CH 50V 120P	1	
C807	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C808, 09	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	2	
C810	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1	
C811-14	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	4	
C815	ECUX1H470JCV	C. CAPACITOR CH 50V 47P	1	
C816	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C818	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C819	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	1	
C821	ECUX1H470JCV	C. CAPACITOR CH 50V 47P	1	
C822	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	1	
C824	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C826	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	1	
C827	ECUX1H470JCV	C. CAPACITOR CH 50V 47P	1	
C828	ECUX1H020CCV	C. CAPACITOR CH 50V 2P	1	
C829-32	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	4	
C833	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C834	ECUX1H150JCV	C. CAPACITOR CH 50V 15P	1	
C836, 37	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	2	
C850	ECUX1H470JCV	C. CAPACITOR CH 50V 47P	1	
C851	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C852-55	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	4	
C856	ECUX1H390JCV	C. CAPACITOR CH 50V 39P	1	
C857	ECUX1H070DCV	C. CAPACITOR CH 50V 7P	1	
C900	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1	
C901	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C902	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1	
C903	ECUX1H181JCV	C. CAPACITOR CH 50V 180P	1	
C904, 05	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	2	
C906	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1	
C907	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C908	ECUX1H180JCV	C. CAPACITOR CH 50V 18P	1	
C909	ECUX1H680JCV	C. CAPACITOR CH 50V 68P	1	
C910, 11	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	2	
C912	ECEV1HN010Q	E. CAPACITOR CH 50V 1U	1	
C913	ECUX1H330JCV	C. CAPACITOR CH 50V 33P	1	
C914-16	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	3	
C917	ECUX1H101JCV	C. CAPACITOR CH 50V 100P	1	
C918	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	1	
C919	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1	
C920	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C921	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1	
C922	ECUX1H101JCV	C. CAPACITOR CH 50V 100P	1	
C923	ECUX1H470JCV	C. CAPACITOR CH 50V 47P	1	
C924	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1	
C925	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C926	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1	
C927	ECUX1H390JCV	C. CAPACITOR CH 50V 39P	1	
C928	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C929	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1	
C930	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C931	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1	
C932	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C933	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1	
C934, 35	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	2	
C936	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1	
C937	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1	
C938	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C939	ECEV1HN010Q	E. CAPACITOR CH 50V 1U	1	
C940	ECUX1H102JV	C. CAPACITOR CH 50V 1000P	1	
C941, 42	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	2	
C943, 44	ECUX1H150JCV	C. CAPACITOR CH 50V 15P	2	
C945	ECEV1HN010Q	E. CAPACITOR CH 50V 1U	1	
C946	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C947	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1	
C948, 49	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	2	
C1000	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1	
C1001	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C1002	ECUX1H820JCV	C. CAPACITOR CH 50V 82P	1	
C1003	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C1004	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C1005	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C1006-12	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	7	
C1013	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C1014	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1	
C1015-18	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	4	
C1019	ECEV1EN3R3Q	E. CAPACITOR CH 25V 3.3U	1	
C1020	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C1021	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1	
C1023	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C1024	ECUX1H102JV	C. CAPACITOR CH 50V 1000P	1	
C1025-27	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	3	
C1028, 29	ECUX1H470JCV	C. CAPACITOR CH 50V 47P	2	
C1030	ECUX1H680JCV	C. CAPACITOR CH 50V 68P	1	
C1031	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C1035	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1	
C1050	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C1052	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1	
C1053-56	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	4	
C1057	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1	
C1058	ECEV1HN010Q	E. CAPACITOR CH 50V 1U	1	
C1059	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C1060	ECUX1H102JV	C. CAPACITOR CH 50V 1000P	1	
C1062	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C1100, 01	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	2	
C1103	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C1104	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C1105	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C1106	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C1107, 08	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	2	
C1109	ECEV1CN100Q	E. CAPACITOR CH 16V 10U	1	
C1110	ECUX1H102JV	C. CAPACITOR CH 50V 1000P	1	
C1111-13	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	3	
C1114	ECUX1H150JCV	C. CAPACITOR CH 50V 15P	1	
C1115-20	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	6	
C1121	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C1122	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C1123	ECUX1H101JCV	C. CAPACITOR CH 50V 100P	1	
C1124-26	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	3	
C1127	ECUX1H681JV	C. CAPACITOR CH 50V 680P	1	
C1128	ECUX1H471JCV	C. CAPACITOR CH 50V 470P	1	
C1129-31	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	3	
C1150	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C1151	ECEV1EV100Q	E. CAPACITOR CH 25V 10U	1	
C1152	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C1153	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C1154	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C1155	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C1156	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C1157, 58	ECEV1EV100Q	E. CAPACITOR CH 25V 10U	2	
C1159, 60	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	2	
C1161	ECEV1EV100Q	E. CAPACITOR CH 25V 10U	1	
C1162	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C1163	ECEV1EV100Q	E. CAPACITOR CH 25V 10U	1	
C1164	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C1165	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C1166, 67	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	2	
C1168	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C1169	ECEV1EV100Q	E. CAPACITOR CH 25V 10U	1	
C1170-75	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	6	
C1176	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C1177	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C1178	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C1179	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C1180	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C1181	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C1182	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C1183	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C1184	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C1185	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C1186	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C1187-95	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	9	
C1196-03	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	8	
C1204-11	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	8	
C1250-53	ECUX1C104KBV	C. CAPACITOR CH 16V 0.1U	4	
C1254-57	ECEV1EV100Q	E. CAPACITOR CH 25V 10U	4	
C1258-61	ECUX1C104KBV	C. CAPACITOR CH 16V 0.1U	4	
C1262-65	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	4	
C1266-69	ECUX1C104KBV	C. CAPACITOR CH 16V 0.1U	4	
D400	MA152K	DIODE	1	
D500	MA152K	DIODE	1	
D501, 02	MA335	DIODE	2	
D503	MA152K	DIODE	1	
D900	MA142WK	DIODE	1	
D901	MA152K	DIODE	1	
D1000	MA142K	DIODE	1	
D1001	MA335	DIODE	1	
D1050	MA152K	DIODE	1	
D1100	MA142K	DIODE	1	
FL301	VLF1294	FILTER	1	
FL303	VLF1295	FILTER	1	
FL305	VLF1295	FILTER	1	
FL1150-53	VLF1016A223	FILTER	4	
IC150, 51	SN74S1051NS	IC	2	
IC152	74ALS245ASJ	IC	1	
IC153, 54	74ALS541SJ	IC	2	
IC156	VS12391B	IC	1	
IC157	SN74S1051NS	IC	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC158	MC74HC574AF	IC	1	
IC159	UPD71055GB	IC	1	
IC160	MC74HC574AF	IC	1	
IC161	SN74S1051NS	IC	1	
IC163	MC74HC74AF	IC	1	
IC200, 01	MC74HC574AF	IC	2	
IC202	MC74HC541AF	IC	1	
IC203	TC7SH08FU	IC	1	
IC250	XC62AP3002P	IC	1	
IC251	UPD65840G024	IC	1	
IC254	74F244SJ	IC	1	
IC256	74F244SJ	IC	1	
IC300	NJM082BM	IC	1	
IC301	NJM084M	IC	1	
IC303	MC74HC244AF	IC	1	
IC306-08	MB40778PF	IC	3	
IC309-11	EL4089CS	IC	3	
IC312, 13	MC14053BF	IC	2	
IC500	NJM082BM	IC	1	
IC502	MC74HC4053F	IC	1	
IC503	M51272FP	IC	1	
IC600	74ALS541SJ	IC	1	
IC601-03	MC10H124M	IC	3	
IC700	VSI2499C	IC	1	
IC702	74F244SJ	IC	1	
IC800	EL4089CS	IC	1	
IC801	NJM082BM	IC	1	
IC802	NJM2534V	IC	1	
IC805	AD828AR	IC	1	
IC850	NJM2534V	IC	1	
IC900	AN91A12S	IC	1	
IC902	NE521D	IC	1	
IC904	MC74HC04AF	IC	1	
IC908, 09	MM74HC221AM	IC	2	
IC910	MC74HC125AF	IC	1	
IC913	NJM082BM	IC	1	
IC915	SN74LS221NS	IC	1	
IC916	NJM082BM	IC	1	
IC923-25	TC7SH00FU	IC	3	
IC1000	NE521D	IC	1	
IC1001	DAC10GS	IC	1	
IC1002	MC14053BF	IC	1	
IC1003	NJM082BM	IC	1	
IC1004	TC7SH08FU	IC	1	
IC1005	NJM084M	IC	1	
IC1015	TC7SH00FU	IC	1	
IC1051	NJM082BM	IC	1	
IC1053	SN74AS74ANS	IC	1	
IC1055, 56	SN74AS244AN	IC	2	
IC1057	SN74AS74ANS	IC	1	
IC1100	NJM084M	IC	1	
IC1102	DAC10GS	IC	1	
IC1103	SN74LS221NS	IC	1	
IC1106	UPD65650J203	IC	1	
IC1107, 08	MC74HC04AF	IC	2	
IC1113	MC74HC244AF	IC	1	
IC1114	MC74HC00AF	IC	1	
IC1115, 16	SN74LS221NS	IC	2	
IC1150	NJM78L09UA	IC	1	
IC1151	NJM78L05UA	IC	1	
IC1152	NJM79L05UA	IC	1	
IC1153	NJM78L09UA	IC	1	
IC1154	AN78N05	IC	1	
IC1155	NJM79L09UA	IC	1	
IC1156	NJM78L09UA	IC	1	
IC1157	NJM78L05UA	IC	1	
IC1158	NJM79L05UA	IC	1	
IC1159	NJM79L09UA	IC	1	
IC1160	AN78N09	IC	1	
IC1161	NJM78L05UA	IC	1	
IC1162	NJM79L05UA	IC	1	
IC1163	AN79N09	IC	1	
IC1165, 66	NJM78L09UA	IC	2	
IC1167, 68	NJM79L09UA	IC	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
L100-06	VLP0133	COIL	7	
L302, 03	VLQ0163J6R8	COIL 6.8UH	2	
L304	VLQ0163J120	COIL 12UH	1	
L305, 06	VLQ0163J560	COIL 56UH	2	
L307	VLQ0163J220	COIL 22UH	1	
L400	VLQ0163J470	COIL 47UH	1	
L500-02	VLQ0163J220	COIL 22UH	3	
L503	VLQ0163J270	COIL 27UH	1	
L504	VLQ0163J820	COIL 82UH	1	
L505, 06	VLQ0163J470	COIL 47UH	2	
L507	VLQ0163J270	COIL 27UH	1	
L508	VLQ0163J6R8	COIL 6.8UH	1	
L509	VLQ0163J470	COIL 47UH	1	
L510	VLQ0163J5R6	COIL 5.6UH	1	
L800	VLQ0163J120	COIL 12UH	1	
L801, 02	VLQ0163J220	COIL 22UH	2	
L850	VLQ0163J180	COIL 18UH	1	
L900	VLQ0163J101	COIL 100UH	1	
L901	VLQ0163J221	COIL 220UH	1	
L902	VLQ0163J680	COIL 68UH	1	
L903-08	VLQ0163J470	COIL 47UH	6	
L1000	VLQ0163J470	COIL 47UH	1	
L1001	VLQ0163J221	COIL 220UH	1	
L1002, 03	VLQ0163J220	COIL 22UH	2	
L1004	VLQ0163J470	COIL 47UH	1	
L1100, 01	VLQ0163J220	COIL 22UH	2	
P1, P2	VJP3454B096	CONNECTOR (MALE)	2	
P3	VJP1233T	CONNECTOR (MALE) 6P	1	
Q300-05	2SD601A-R	TRANSISTOR	6	
Q306-14	2SB709A-R	TRANSISTOR	9	
Q315-17	2SD601A-R	TRANSISTOR	3	
Q318, 19	2SB709A-R	TRANSISTOR	2	
Q400	2SC2404-D	TRANSISTOR	1	
Q401-03	2SB709A-R	TRANSISTOR	3	
Q404, 05	2SD601A-R	TRANSISTOR	2	
Q406, 07	2SB709A-R	TRANSISTOR	2	
Q408-10	2SD601A-R	TRANSISTOR	3	
Q500	2SB709A-R	TRANSISTOR	1	
Q501, 02	2SC2295-C	TRANSISTOR	2	
Q503, 04	2SB709A-R	TRANSISTOR	2	
Q505	2SC2295-C	TRANSISTOR	1	
Q506, 07	2SB709A-R	TRANSISTOR	2	
Q508	2SD601A-R	TRANSISTOR	1	
Q510	2SD601A-R	TRANSISTOR	1	
Q513	2SD601A-R	TRANSISTOR	1	
Q800, 01	2SA1532-B	TRANSISTOR	2	
Q802, 03	2SD601A-R	TRANSISTOR	2	
Q804	2SB709A-R	TRANSISTOR	1	
Q806, 07	2SB709A-R	TRANSISTOR	2	
Q850	2SA1532-B	TRANSISTOR	1	
Q851	2SB709A-R	TRANSISTOR	1	
Q1000	2SB709A-R	TRANSISTOR	1	
Q1001, 02	2SK608-R	TRANSISTOR	2	
QR200	UN2212	TRANSISTOR-RESISTOR	1	
QR201	MUN2213	TRANSISTOR-RESISTOR	1	
QR202	MUN2112	TRANSISTOR-RESISTOR	1	
QR300	MUN2213	TRANSISTOR-RESISTOR	1	
QR301	MUN2112	TRANSISTOR-RESISTOR	1	
QR500, 01	MUN2213	TRANSISTOR-RESISTOR	2	
QR801, 02	MUN2213	TRANSISTOR-RESISTOR	2	
QR803	MUN2112	TRANSISTOR-RESISTOR	1	
R151, 52	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
R153, 54	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R155-65	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	11	
R166-69	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	4	
R170-80	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	11	
R181, 82	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R183-85	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	3	
R186	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R200-21	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	22	
R222	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R223, 24	ERJ3GEYJ101	M. RESISTOR CH 1/16W 100	2	
R225-32	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	8	
R234	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R239	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R251	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R252	ERJ3GEYJ680	M. RESISTOR CH 1/16W 68	1	
R253	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R254	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R255	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R258	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R260	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R262	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R264	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R266-70	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	5	
R273, 74	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	2	
R276	ERJ3GEYJ101	M. RESISTOR CH 1/16W 100	1	
R302	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R303	ERJ3GEYG472	M. RESISTOR CH 1/16W 4. 7K	1	
R304	ERJ3GEYJ153	M. RESISTOR CH 1/16W 15K	1	
R305	ERJ3GEYJ563	M. RESISTOR CH 1/16W 56K	1	
R306	ERJ3GEYJ223	M. RESISTOR CH 1/16W 22K	1	
R307	ERJ3GEYJ101	M. RESISTOR CH 1/16W 100	1	
R308, 09	ERJ3RBD472	M. RESISTOR CH 1/10W 4. 7K	2	
R310, 11	ERJ3RBD103	M. RESISTOR CH 3W 10K	2	
R312	ERJ3GEYJ470	M. RESISTOR CH 1/16W 47	1	
R313	ERJ3GEYJ272V	M. RESISTOR CH 1/16W 2. 7K	1	
R314	ERJ3GEYJ222	M. RESISTOR CH 1/16W 2. 2K	1	
R315, 16	ERJ3GEYJ331	M. RESISTOR CH 1/16W 330	2	
R317	ERJ3GEYJ470	M. RESISTOR CH 1/16W 47	1	
R318	ERJ3GEYJ331	M. RESISTOR CH 1/16W 330	1	
R320	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R321	ERJ3GEYJ331	M. RESISTOR CH 1/16W 330	1	
R322	ERJ3GEYJ470	M. RESISTOR CH 1/16W 47	1	
R323, 24	ERJ3GEYJ331	M. RESISTOR CH 1/16W 330	2	
R326	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R329-32	ERJ3GEYG471	M. RESISTOR CH 1/16W 470	4	
R334	ERJ3GEYJ222	M. RESISTOR CH 1/16W 2. 2K	1	
R336	ERJ3GEYJ331	M. RESISTOR CH 1/16W 330	1	
R337	ERJ3GEYJ222	M. RESISTOR CH 1/16W 2. 2K	1	
R338	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R339	ERJ3GEYJ101	M. RESISTOR CH 1/16W 100	1	
R340	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R341	ERJ3GEYJ222	M. RESISTOR CH 1/16W 2. 2K	1	
R342	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R343	ERJ3GEYJ101	M. RESISTOR CH 1/16W 100	1	
R344	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R345	ERJ3GEYJ101	M. RESISTOR CH 1/16W 100	1	
R347, 48	ERJ3GEYJ221	M. RESISTOR CH 1/16W 220	2	
R349	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R350	ERJ3GEYJ821	M. RESISTOR CH 1/16W 820	1	
R351	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R352	ERJ3GEYG152	M. RESISTOR CH 1/16W 1. 5K	1	
R353	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R354	ERJ3GEYJ821	M. RESISTOR CH 1/16W 820	1	
R355	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R356	ERJ3GEYG152	M. RESISTOR CH 1/16W 1. 5K	1	
R357	ERJ3GEYJ151	M. RESISTOR CH 1/16W 150	1	
R358	ERJ3GEYJ681	M. RESISTOR CH 1/16W 680	1	
R359	ERJ3GEYJ124	M. RESISTOR CH 1/16W 120K	1	
R361	ERJ3GEYJ470	M. RESISTOR CH 1/16W 47	1	
R362	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R363	ERJ3GEYJ681	M. RESISTOR CH 1/16W 680	1	
R364	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R366	ERJ3GEYJ121	M. RESISTOR CH 1/16W 120	1	
R367	ERJ3GEYJ470	M. RESISTOR CH 1/16W 47	1	
R368	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R369	ERJ3GEYJ681	M. RESISTOR CH 1/16W 680	1	
R370	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R372	ERJ3GEYJ121	M. RESISTOR CH 1/16W 120	1	
R374, 75	ERJ3GEYJ562	M. RESISTOR CH 1/16W 5. 6K	2	
R378	ERJ3GEYJ681	M. RESISTOR CH 1/16W 680	1	
R379	ERJ3GEYG152	M. RESISTOR CH 1/16W 1. 5K	1	
R380	ERJ3GEYJ681	M. RESISTOR CH 1/16W 680	1	
R382	ERJ3GEYJ681	M. RESISTOR CH 1/16W 680	1	
R383	ERJ3GEYG152	M. RESISTOR CH 1/16W 1. 5K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R384	ERJ3GEYJ151	M. RESISTOR CH 1/16W 150	1	
R385	ERJ6RBD752	M. RESISTOR CH 1/10W 7. 5K	1	
R386-88	ERJ3GEYJ222	M. RESISTOR CH 1/16W 2. 2K	3	
R391, 92	ERJ3GEYJ222	M. RESISTOR CH 1/16W 2. 2K	2	
R393, 94	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	2	
R400	ERJ3GEYG332	M. RESISTOR CH 1/16W 3. 3K	1	
R401	ERJ3GEYG472	M. RESISTOR CH 1/16W 4. 7K	1	
R402	ERJ3GEYJ153	M. RESISTOR CH 1/16W 15K	1	
R403	ERJ6RBD151	M. RESISTOR CH 1/10W 150	1	
R404	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R405	ERJ3GEYG472	M. RESISTOR CH 1/16W 4. 7K	1	
R406, 07	ERJ3GEYJ221	M. RESISTOR CH 1/16W 220	2	
R408	ERJ3GEYJ222	M. RESISTOR CH 1/16W 2. 2K	1	
R409	ERJ6RBD752	M. RESISTOR CH 1/10W 7. 5K	1	
R410	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R411	ERJ3GEYJ222	M. RESISTOR CH 1/16W 2. 2K	1	
R412	ERJ3GEYG332	M. RESISTOR CH 1/16W 3. 3K	1	
R413	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R414	ERJ3GEYJ222	M. RESISTOR CH 1/16W 2. 2K	1	
R415, 16	ERJ3GEYJ221	M. RESISTOR CH 1/16W 220	2	
R417, 18	ERJ6RBD221	M. RESISTOR CH 1/10W 220	2	
R419	ERJ6RBD271	M. RESISTOR CH 1/10W 270	1	
R420	ERJ6RBD121	M. RESISTOR CH 1/10W 120	1	
R421	ERJ3GEYJ222	M. RESISTOR CH 1/16W 2. 2K	1	
R422	ERJ6RBD121	M. RESISTOR CH 1/10W 120	1	
R423, 24	ERJ6RBD271	M. RESISTOR CH 1/10W 270	2	
R425	ERJ3GEYJ222	M. RESISTOR CH 1/16W 2. 2K	1	
R426	ERJ6RBD121	M. RESISTOR CH 1/10W 120	1	
R427	ERJ6RBD221	M. RESISTOR CH 1/10W 220	1	
R428	ERJ6RBD181	M. RESISTOR CH 1/10W 180	1	
R429	ERJ3GEYJ470	M. RESISTOR CH 1/16W 47	1	
R430	ERJ3GEYG471	M. RESISTOR CH 1/16W 470	1	
R431	ERJ3GEYJ222	M. RESISTOR CH 1/16W 2. 2K	1	
R432	ERJ3GEYG471	M. RESISTOR CH 1/16W 470	1	
R433	ERJ3GEYJ222	M. RESISTOR CH 1/16W 2. 2K	1	
R434, 35	ERJ3GEYJ470	M. RESISTOR CH 1/16W 47	2	
R500	ERJ3GEYJ821	M. RESISTOR CH 1/16W 820	1	
R502, 03	ERJ3GEYJ272V	M. RESISTOR CH 1/16W 2. 7K	2	
R504	ERJ3GEYG471	M. RESISTOR CH 1/16W 470	1	
R505	ERJ3GEYJ101	M. RESISTOR CH 1/16W 100	1	
R507	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R509	ERJ3GEYJ393	M. RESISTOR CH 1/16W 39K	1	
R510	ERJ3GEYG332	M. RESISTOR CH 1/16W 3. 3K	1	
R511	ERJ3GEYJ562	M. RESISTOR CH 1/16W 5. 6K	1	
R512	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R513	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R514	ERJ3GEYG472	M. RESISTOR CH 1/16W 4. 7K	1	
R515	ERJ3GEYJ681	M. RESISTOR CH 1/16W 680	1	
R516	ERJ3GEYJ391	M. RESISTOR CH 1/16W 390	1	
R517	ERJ3GEYG152	M. RESISTOR CH 1/16W 1. 5K	1	
R518	ERJ3GEYJ470	M. RESISTOR CH 1/16W 47	1	
R519, 20	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	2	
R521	ERJ3GEYG152	M. RESISTOR CH 1/16W 1. 5K	1	
R522	ERJ3GEYJ330	M. RESISTOR CH 1/16W 33	1	
R523	ERJ3GEYJ823	M. RESISTOR CH 1/16W 82K	1	
R524	ERJ3GEYJ681	M. RESISTOR CH 1/16W 680	1	
R525	ERJ3GEYJ105	M. RESISTOR CH 1/16W 1M	1	
R526	ERJ3GEYJ394	M. RESISTOR CH 1/16W 390K	1	
R527	ERJ3GEYG152	M. RESISTOR CH 1/16W 1. 5K	1	
R528	ERJ3GEYG332	M. RESISTOR CH 1/16W 3. 3K	1	
R529	ERJ3GEYJ562	M. RESISTOR CH 1/16W 5. 6K	1	
R530	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R531	ERJ3GEYG472	M. RESISTOR CH 1/16W 4. 7K	1	
R532-34	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	3	
R535, 36	ERJ3GEYG152	M. RESISTOR CH 1/16W 1. 5K	2	
R537, 38	ERJ3GEYJ333	M. RESISTOR CH 1/16W 33K	2	
R539	ERJ3GEYG152	M. RESISTOR CH 1/16W 1. 5K	1	
R540, 41	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	2	
R542	ERJ3GEYJ181	M. RESISTOR CH 1/16W 180	1	
R543	ERJ3GEYG152	M. RESISTOR CH 1/16W 1. 5K	1	
R544, 45	ERJ3GEYJ222	M. RESISTOR CH 1/16W 2. 2K	2	
R546	ERJ3GEYJ333	M. RESISTOR CH 1/16W 33K	1	
R547, 48	ERJ3GEYG152	M. RESISTOR CH 1/16W 1. 5K	2	
R549	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R550	ERJ3GEYJ470	M. RESISTOR CH 1/16W 47	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R552	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R553	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R559	ERJ6RBD301	M. RESISTOR CH 1/10W 300	1	
R560	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R561	ERJ3GEYJ470	M. RESISTOR CH 1/16W 47	1	
R562	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R565	ERJ3GEYG332	M. RESISTOR CH 1/16W 3.3K	1	
R571	ERJ6RBD301	M. RESISTOR CH 1/10W 300	1	
R572	ERJ3GEYG332	M. RESISTOR CH 1/16W 3.3K	1	
R573	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R574	ERJ3GEYJ470	M. RESISTOR CH 1/16W 47	1	
R577	ERJ3GEYG332	M. RESISTOR CH 1/16W 3.3K	1	
R579	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R580	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R581	ERJ3GEYJ153	M. RESISTOR CH 1/16W 15K	1	
R583	ERJ3GEYG152	M. RESISTOR CH 1/16W 1.5K	1	
R585	ERJ3GEYG152	M. RESISTOR CH 1/16W 1.5K	1	
R600	ERJ3GEYJ101	M. RESISTOR CH 1/16W 100	1	
R601-10	ERJ3GEYJ560	M. RESISTOR CH 1/16W 56	10	
R611-34	ERJ3GEYJ681	M. RESISTOR CH 1/16W 680	24	
R635-58	ERJ3GEYJ330	M. RESISTOR CH 1/16W 33	24	
R700, 01	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	2	
R702	ERJ3GEYJ101	M. RESISTOR CH 1/16W 100	1	
R800	ERJ3GEYJ221	M. RESISTOR CH 1/16W 220	1	
R801	ERJ3GEYJ182	M. RESISTOR CH 1/16W 1.8K	1	
R802	ERJ3GEYJ151	M. RESISTOR CH 1/16W 150	1	
R803	ERJ3GEYJ681	M. RESISTOR CH 1/16W 680	1	
R804	ERJ3GEYJ104	M. RESISTOR CH 1/16W 100K	1	
R806	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R810	ERJ3GEYJ563	M. RESISTOR CH 1/16W 56K	1	
R812	ERJ3GEYJ470	M. RESISTOR CH 1/16W 47	1	
R813, 14	ERJ3GEYJ563	M. RESISTOR CH 1/16W 56K	2	
R815	ERJ3GEYJ223	M. RESISTOR CH 1/16W 22K	1	
R816	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R817	ERJ3GEYG472	M. RESISTOR CH 1/16W 4.7K	1	
R820	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R821	ERJ3GEYG472	M. RESISTOR CH 1/16W 4.7K	1	
R822	ERJ3GEYJ223	M. RESISTOR CH 1/16W 22K	1	
R823	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R824	ERJ3GEYJ181	M. RESISTOR CH 1/16W 180	1	
R825	ERJ3GEYJ470	M. RESISTOR CH 1/16W 47	1	
R826	ERJ3GEYJ222	M. RESISTOR CH 1/16W 2.2K	1	
R828	VRE00661O102	M. RESISTOR CH 1/10W 1K	1	
R829, 30	ERJ3GEYG152	M. RESISTOR CH 1/16W 1.5K	2	
R831, 32	ERJ3GEYJ470	M. RESISTOR CH 1/16W 47	2	
R833	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R834	ERJ6RBD152	M. RESISTOR CH 1/10W 1.5K	1	
R835, 36	ERJ3RBD152	M. RESISTOR CH 3W 1.5K	2	
R837	ERJ3GEYJ563	M. RESISTOR CH 1/16W 56K	1	
R838-40	ERJ3RBD152	M. RESISTOR CH 3W 1.5K	3	
R841	ERJ3GEYG332	M. RESISTOR CH 1/16W 3.3K	1	
R842	ERJ3GEYJ124	M. RESISTOR CH 1/16W 120K	1	
R843	ERJ3RBD181	M. RESISTOR CH 3W 180	1	
R844, 45	ERJ3GEYJ183	M. RESISTOR CH 1/16W 18K	2	
R849, 50	ERJ3GEYJ681	M. RESISTOR CH 1/16W 680	2	
R851	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R852	ERJ3GEYJ222	M. RESISTOR CH 1/16W 2.2K	1	
R853	ERJ3GEYJ470	M. RESISTOR CH 1/16W 47	1	
R854	ERJ3GEYJ821	M. RESISTOR CH 1/16W 820	1	
R855, 56	ERJ3GEYJ681	M. RESISTOR CH 1/16W 680	2	
R857	ERJ3GEYJ391	M. RESISTOR CH 1/16W 390	1	
R858, 59	ERJ3GEYJ470	M. RESISTOR CH 1/16W 47	2	
R860	ERJ3GEYJ220	M. RESISTOR CH 1/16W 22	1	
R861	ERJ3GEYJ470	M. RESISTOR CH 1/16W 47	1	
R862	ERJ3GEYJ821	M. RESISTOR CH 1/16W 820	1	
R863	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R864	ERJ3GEYJ223	M. RESISTOR CH 1/16W 22K	1	
R865	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R866	ERJ3GEYJ272V	M. RESISTOR CH 1/16W 2.7K	1	
R870, 71	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	2	
R874	ERJ3GEYG332	M. RESISTOR CH 1/16W 3.3K	1	
R876	ERJ3GEYJ563	M. RESISTOR CH 1/16W 56K	1	
R877	ERJ3GEYJ104	M. RESISTOR CH 1/16W 100K	1	
R881	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R900	ERJ3GEYJ224	M. RESISTOR CH 1/16W 220K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R901	ERJ3GEYJ684	M. RESISTOR CH 1/16W 680K	1	
R902	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R903	ERJ3GEYJ221	M. RESISTOR CH 1/16W 220	1	
R904, 05	ERJ3GEYJ222	M. RESISTOR CH 1/16W 2.2K	2	
R906, 07	ERJ3GEYG822	M. RESISTOR CH 1/16W 8.2K	2	
R908-10	ERJ3GEYJ222	M. RESISTOR CH 1/16W 2.2K	3	
R911	ERJ3GEYJ184	M. RESISTOR CH 1/16W 180K	1	
R912	ERJ3GEYJ222	M. RESISTOR CH 1/16W 2.2K	1	
R913	ERJ3GEYJ683	M. RESISTOR CH 1/16W 68K	1	
R914	ERJ3GEYJ223	M. RESISTOR CH 1/16W 22K	1	
R915	ERJ3GEYG822	M. RESISTOR CH 1/16W 8.2K	1	
R916	ERJ3GEYG682	M. RESISTOR CH 1/16W 6.8K	1	
R917	ERJ3GEYJ563	M. RESISTOR CH 1/16W 56K	1	
R918	ERJ3GEYG471	M. RESISTOR CH 1/16W 470	1	
R919	ERJ3GEYJ272V	M. RESISTOR CH 1/16W 2.7K	1	
R920	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R921, 22	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	2	
R923	ERJ3GEYJ223	M. RESISTOR CH 1/16W 22K	1	
R924	ERJ3GEYJ105	M. RESISTOR CH 1/16W 1M	1	
R925, 26	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	2	
R927	ERJ3GEYJ222	M. RESISTOR CH 1/16W 2.2K	1	
R928	ERJ3GEYJ122	M. RESISTOR CH 1/16W 1.2K	1	
R929	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R930	ERJ3GEYG472	M. RESISTOR CH 1/16W 4.7K	1	
R931	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R932	ERJ3GEYJ104	M. RESISTOR CH 1/16W 100K	1	
R933	ERJ3GEYJ105	M. RESISTOR CH 1/16W 1M	1	
R934, 35	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	2	
R1000	ERJ3GEYJ222	M. RESISTOR CH 1/16W 2.2K	1	
R1001	ERJ3GEYG152	M. RESISTOR CH 1/16W 1.5K	1	
R1002	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R1003	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R1004	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R1006, 07	ERJ3GEYG472	M. RESISTOR CH 1/16W 4.7K	2	
R1008	ERJ3GEYJ153	M. RESISTOR CH 1/16W 15K	1	
R1009	ERJ3GEYJ273	M. RESISTOR CH 1/16W 27K	1	
R1010	ERJ3GEYJ222	M. RESISTOR CH 1/16W 2.2K	1	
R1011	ERJ3GEYJ563	M. RESISTOR CH 1/16W 56K	1	
R1013	ERJ3GEYJ223	M. RESISTOR CH 1/16W 22K	1	
R1014	ERJ3GEYJ105	M. RESISTOR CH 1/16W 1M	1	
R1015	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R1016	ERJ3GEYJ563	M. RESISTOR CH 1/16W 56K	1	
R1018	ERJ3GEYG822	M. RESISTOR CH 1/16W 8.2K	1	
R1019	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	1	
R1020	ERJ3GEYJ153	M. RESISTOR CH 1/16W 15K	1	
R1021	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R1022, 23	ERJ3GEYJ473	M. RESISTOR CH 1/16W 47K	2	
R1024	ERJ3GEYG332	M. RESISTOR CH 1/16W 3.3K	1	
R1025	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R1026	ERJ3GEYG822	M. RESISTOR CH 1/16W 8.2K	1	
R1027	ERJ3GEYG332	M. RESISTOR CH 1/16W 3.3K	1	
R1028	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R1030	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R1036	ERJ3GEYJ101	M. RESISTOR CH 1/16W 100	1	
R1050	ERJ3GEYG471	M. RESISTOR CH 1/16W 470	1	
R1051	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R1052	ERJ3GEYJ333	M. RESISTOR CH 1/16W 33K	1	
R1053	ERJ3GEYG682	M. RESISTOR CH 1/16W 6.8K	1	
R1054	ERJ3GEYJ333	M. RESISTOR CH 1/16W 33K	1	
R1055	ERJ3GEYJ105	M. RESISTOR CH 1/16W 1M	1	
R1056	ERJ3GEYJ101	M. RESISTOR CH 1/16W 100	1	
R1057	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R1058	ERJ3GEYJ101	M. RESISTOR CH 1/16W 100	1	
R1060	ERJ3GEYJ101	M. RESISTOR CH 1/16W 100	1	
R1100	ERJ3GEYJ562	M. RESISTOR CH 1/16W 5.6K	1	
R1101	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R1103	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R1104	ERJ3GEYJ563	M. RESISTOR CH 1/16W 56K	1	
R1105	ERJ3GEYG682	M. RESISTOR CH 1/16W 6.8K	1	
R1106	ERJ3GEYG472	M. RESISTOR CH 1/16W 4.7K	1	
R1107	ERJ3GEYG152	M. RESISTOR CH 1/16W 1.5K	1	
R1108	ERJ3GEYG472	M. RESISTOR CH 1/16W 4.7K	1	
R1109	ERJ3GEYG682	M. RESISTOR CH 1/16W 6.8K	1	
R1110	ERJ3GEYJ563	M. RESISTOR CH 1/16W 56K	1	
R1112	ERJ3GEYJ563	M. RESISTOR CH 1/16W 56K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R1113	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R1115-17	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	3	
R1119	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R1121	ERJ3GEY0R00	M. RESISTOR CH 1/16W 0	1	
R1122	ERJ3GEYJ104	M. RESISTOR CH 1/16W 100K	1	
R1123	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
R1124	ERJ3GEYJ562	M. RESISTOR CH 1/16W 5.6K	1	
R1125	ERJ3GEYJ103	M. RESISTOR CH 1/16W 10K	1	
R1126	ERJ3GEYJ101	M. RESISTOR CH 1/16W 100	1	
R1127	ERJ3GEYJ273	M. RESISTOR CH 1/16W 27K	1	
R1128	ERJ3GEYG472	M. RESISTOR CH 1/16W 4.7K	1	
R1129	ERJ3GEYG471	M. RESISTOR CH 1/16W 470	1	
R1135	ERJ3GEYJ124	M. RESISTOR CH 1/16W 120K	1	
R1136	ERJ3GEYG102	M. RESISTOR CH 1/16W 1K	1	
SW400	VSS0372	SWITCH	1	
TG100	VJR0646	TEST POINT	1	
TG901	VJR0646	TEST POINT	1	
TG1106	VJR0646	TEST POINT	1	
TH500	ERTD2FHL102S	THERMISTOR 1K	1	
TP300	VJR0646	TEST POINT	1	
TP903	VJR0646	TEST POINT	1	
TP905	VJR0646	TEST POINT	1	
TP1001	VJR0646	TEST POINT	1	
TP1100	VJR0646	TEST POINT	1	
TP1102-05	VJR0646	TEST POINT	4	
VC1000	ECV1ZW20X53T	TRIMMER	1	
VR300	EVMEGSA00B24	V. RESISTOR 20K	1	
VR301	EVMEGSA00B12	V. RESISTOR 100	1	
VR302-04	EVMEGSA00B13	V. RESISTOR 1K	3	
VR305, 06	EVMEGSA00B52	V. RESISTOR 500	2	
VR307	EVMEGSA00B13	V. RESISTOR 1K	1	
VR310	VRV0113B102	V. RESISTOR 1K	1	
VR400	EVMEGSA00B13	V. RESISTOR 1K	1	
VR500-02	EVMEGSA00B53	V. RESISTOR 5K	3	
VR503	EVMEGSA00B13	V. RESISTOR 1K	1	
VR505, 06	EVMEGSA00B23	V. RESISTOR 2K	2	
VR507	EVMEGSA00B13	V. RESISTOR 1K	1	
VR508, 09	VRV0113B203	V. RESISTOR 20K	2	
VR800	EVMEGSA00B53	V. RESISTOR 5K	1	
VR801	EVMEGSA00B13	V. RESISTOR 1K	1	
VR802	EVMEGSA00B53	V. RESISTOR 5K	1	
VR803	EVMEGSA00B13	V. RESISTOR 1K	1	
VR804	VRV0113B203	V. RESISTOR 20K	1	
VR805	VRV0113B204	V. RESISTOR 200K	1	
VR900	EVMEGSA00B54	V. RESISTOR 50K	1	
VR901	EVMEGSA00B14	V. RESISTOR 10K	1	
VR902	EVMEGSA00B53	V. RESISTOR 5K	1	
VR1000	EVMEGSA00B24	V. RESISTOR 20K	1	
VR1050	EVMEGSA00B53	V. RESISTOR 5K	1	
VR1100	EVMEGSA00B53	V. RESISTOR 5K	1	
VR1102	EVMEGSA00B53	V. RESISTOR 5K	1	
X900	VSX0338	CRYSTAL OSCILLATOR	1	
X901	VSX0567A	CRYSTAL OSCILLATOR	1	
X1000	VSX0081	CRYSTAL OSCILLATOR	1	
X1050	VSX0788	CRYSTAL OSCILLATOR	1	
		MISCELLANEOUS		
	VML2143	CARD PULLER	1	
	VML2144	CARD PULLER	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks

V23431

! Warning

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advice non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service manual by anyone else could result in serious injury or death.

Order No. VSD9801SA162
D20

Service Manual

Supplement

Broadcast Product

Subject : Introduction of New V IN P.C. Board

Please use this supplement together with the Service Manual as follows :

Model No.	Bulletin No.	Order No.	Effective from
AJ-D750P	162	VSD9603M202A/B	L7TRC0001
AJ-D650P	92	VSD9611MG01A/B	L7TRB0004
AJ-D640P	92	VSD9611MG01A/B	K7TRB0001

Board : V IN (F6:VEP83397B)

To improve the manufacturing productivity and introduce the new function, a new F6 V IN P.C. Board (VEP83397B / VJB83397) is introduced. This Supplement Service Manual contains the following items.

1). Electrical Adjustment Procedure
2). Parts List
3). Schematic Diagram
4). P.C. Board Layout

According to this change, the following modification is performed.

1). SETUP_CUT Sub Board (VEP83384A) is absorbed so that the SETUP Cut/Through function can be available without SETUP_CUT Board (VEP83384A). (Refer to Supplement Service Manual No. VSD9705SA102) (for AJ-D750 only)
2). SETUP Cut/Through function is introduced. To execute SETUP Cut/Through function, AV PROM must be up-graded more than N1.02. (Refer to the Supplement Service Manual No. VSD9705SC018-1) (for AJ-650 / AJ-D640)
3). Standardization of P.C. Board.
4). A/D Converter for the color is changed.
5). V Blanking circuit is added. (for AJ-D650/AJ-D640)

10584516610672519 1
524610731107355253

Panasonic

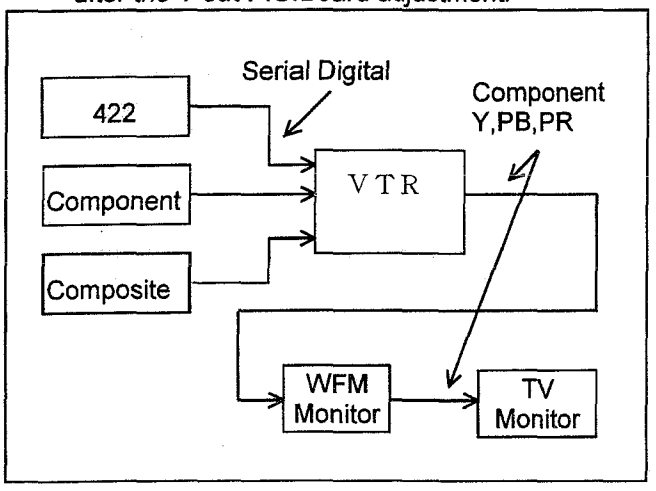
© 1998 Matsushita Electric Industrial Co., Ltd. All rights reserved.
Unauthorized copying and distribution is a violation of law.

8. V IN P.C.Board

8-1. Preparation for Video In Adjustment

BOARD	V IN (F6)
SPEC.	
TEST	
ADJUST	
INPUT	
MODE	
TAPE	
M.EQ	

1. Connect the equipment as shown in the figure.
2. V IN P.C.Board adjustment should be performed after the V out P.C.Board adjustment.



8-2. Component 13.5MHz VCO Adjustment

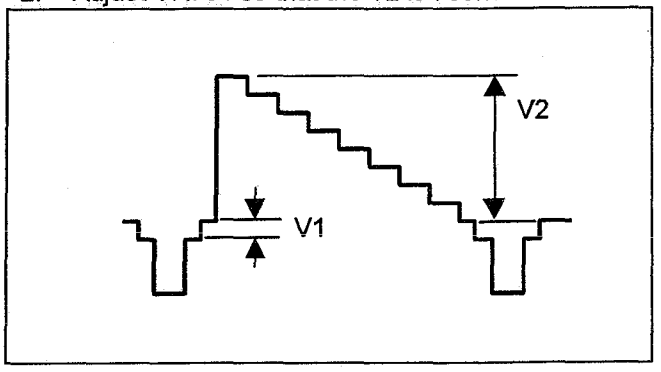
BOARD	V IN (F6)
SPEC.	0V ± 0.1V
TEST	TP601
ADJUST	VL601, VR602
INPUT	ANALOG Y, PB, PR 100% Color Bar
MODE	EE
TAPE	-----
M.EQ	Oscilloscope

1. Set VR602 to the center.
2. First, turn VL601 CCW and adjust VR602 so that the DC Voltage is 0V ± 0.1V.

8-3. Component Y Level Adjustment

BOARD	V IN (F6)
SPEC.	V1 = 0V ± 7mV, V2 = 700mV ± 7mV
TEST	Y out
ADJUST	VR702, VR701
INPUT	ANALOG Y, PB, PR, 100% Color Bar
MODE	E-E
TAPE	-----
M.EQ	WFM

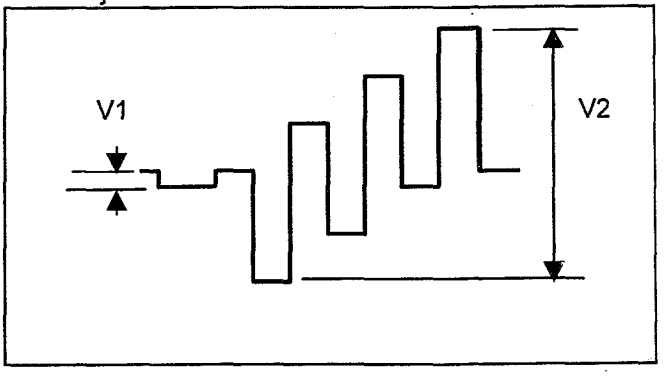
1. Adjust VR702 so that the V1 is 0V ± 7mV.
2. Adjust VR701 so that the V2 is 700mV ± 7mV.



8-4. Component PB Level Adjustment

BOARD	V IN (F6)
SPEC.	V1 = 0V ± 7mV, V2 = 700mV ± 7mV
TEST	PB out
ADJUST	VR752, VR753
INPUT	ANALOG Y, PB, PR 100% Color Bar
MODE	E-E
TAPE	-----
M.EQ	WFM

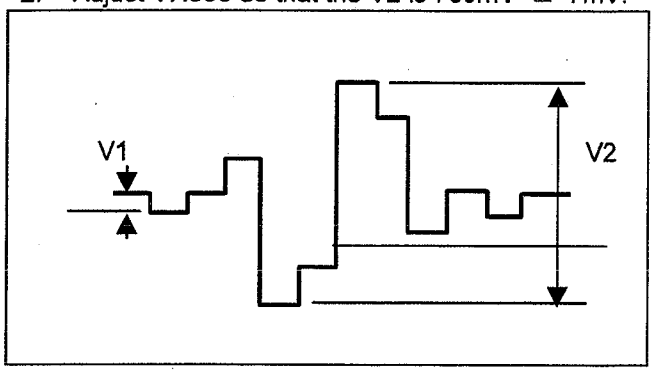
1. Adjust VR752 so that the V1 is 0V ± 7mV.
2. Adjust VR753 so that the V2 is 700mV ± 7mV.



8-5. Component PR Level Adjustment

BOARD	V IN (F6)
SPEC.	V1 = 0V ± 7mV, V2 = 700mV ± 7mV
TEST	PR out
ADJUST	VR802, VR803
INPUT	ANALOG Y, PB, PR 100% Color Bar
MODE	EE
TAPE	-----
M.EQ	WFM

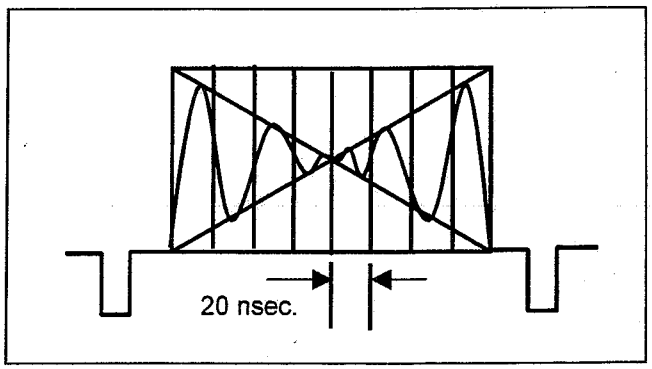
1. Adjust VR802 so that the V1 is 0V ± 7mV.
2. Adjust VR803 so that the V2 is 700mV ± 7mV.



8-6. Component Y/C Timing Adjustment

BOARD	V IN (F6)
SPEC.	0 ± 10nsec
TEST	Y, PB, PR out
ADJUST	PB TIM VR751, PR-TIM VR801
INPUT	ANALOG Y, PB, PR BOWTIE
MODE	E-E
TAPE	-----
M.EQ	WFM

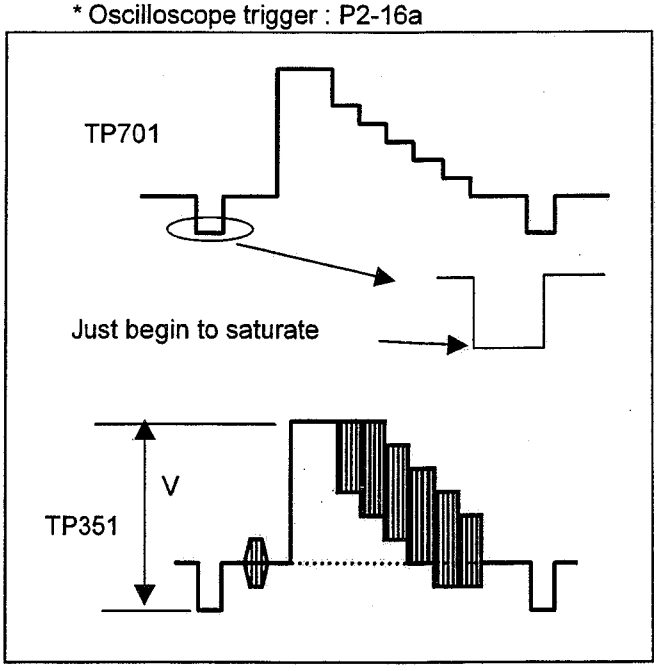
1. Adjust VR751 so that the minimum level of the Y/PB timing signal is 0 ± 10nsec against the center scale.
2. Adjust VR801 so that the minimum level of the Y/PR timing signal is 0 ± 10nsec against the center scale.



8-7. Composite Input Level Adjustment

BOARD	V IN (F6)
SPEC.	V = 1.6V ± 0.02V
TEST	TP701, TP351
ADJUST	VR351, VR301
INPUT	COMPOSITE 100% Color Bar
MODE	E-E
TAPE	-----
M.EQ	Oscilloscope

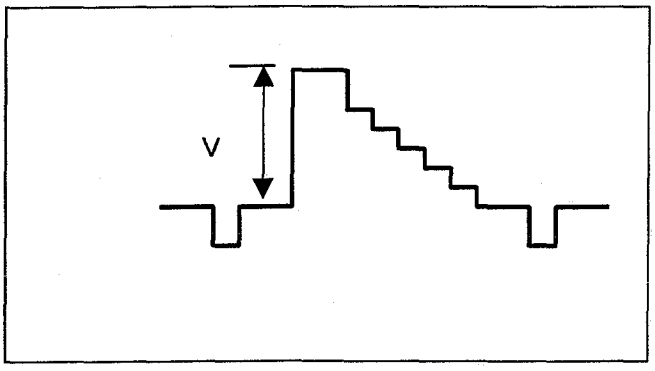
1. Observe TP701 and adjust VR351 at the point where the sync tip just begin to saturate.
2. Adjust VR301 so that the voltage at TP351 is 1.6V ± 0.02V.
   * Oscilloscope trigger : P2-16a



8-8. Composite Y Level Adjustment

BOARD	V IN (F6)
SPEC.	V = 700mV ± 7mV
TEST	Y out
ADJUST	VR452
INPUT	COMPOSITE 75% (w/setup color bar)
MODE	E-E
TAPE	-----
M.EQ	WFM

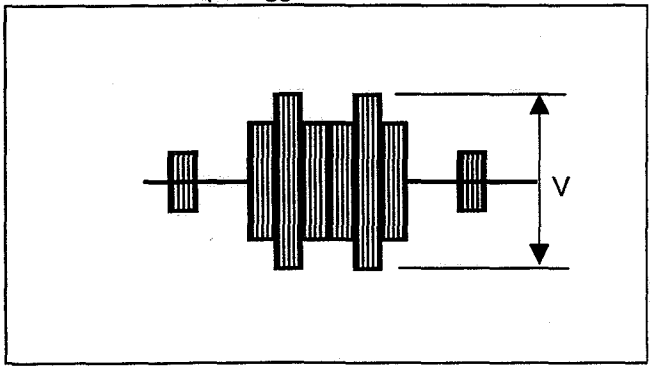
1. Adjustment VR452 so that the V is 700mV ± 7mV.



8-9. Composite Color Level Adjustment

BOARD	V IN (F6)
SPEC.	V = 400mVp-p ± 20mVp-p
TEST	TP503
ADJUST	VR451(I-1)
INPUT	COMPOSITE 75% (w/setup color bar)
MODE	EE
TAPE	-----
M.EQ	WFM

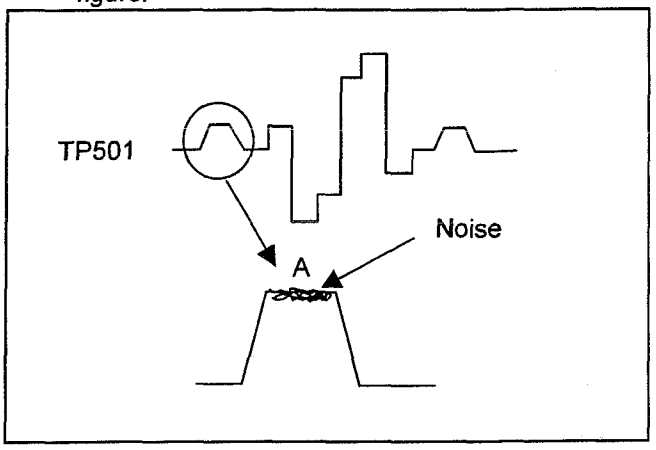
1. Adjustment VR451 so that the V is 400mV ± 20mV.
   * Oscilloscope trigger : P2-16a



8-10. Composite Color Demodulation Adjustment

BOARD	V IN (F6)
SPEC.	
TEST	TP501
ADJUST	VR501, VR512
INPUT	COMPOSITE 75% (w/setup color bar)
MODE	EE
TAPE	-----
M.EQ	Oscilloscope

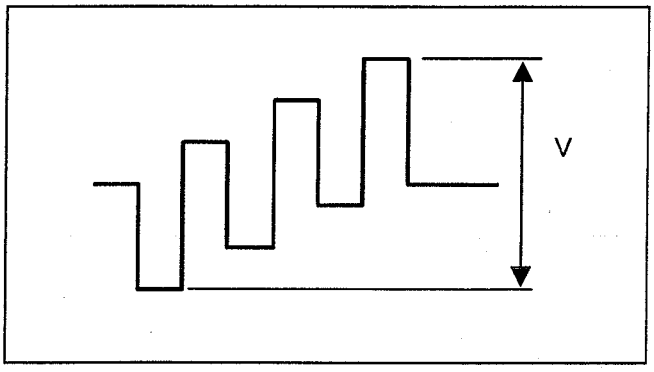
1. Adjust VR501 so that the waveform is as shown in figure (no double image).
2. Adjust VR512 so that the noise portion is positioned on the top of A portion as shown in figure.



8-11. Composite PB Level Adjustment

BOARD	V IN (F6)
SPEC.	V = 486mV ± 7mV
TEST	PB out
ADJUST	VR505
INPUT	COMPOSITE 75% (w/setup color bar)
MODE	EE
TAPE	-----
M.EQ	WFM

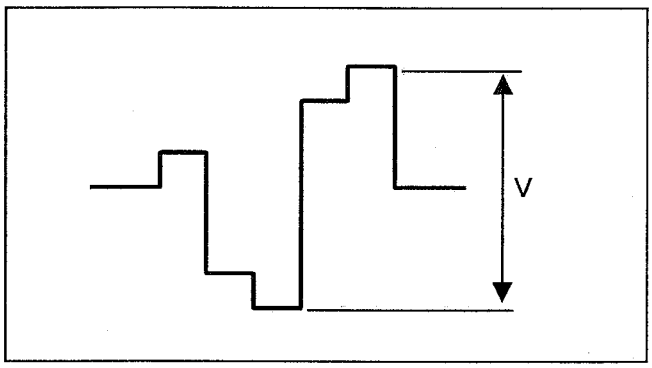
1. Adjustment VR505 so that the V is 486mV± 7mV.



8-12. Composite PR Level Adjustment

BOARD	V IN (F6)
PEC.	V =486mV ± 7mV
TEST	PR out
ADJUST	VR511
INPUT	COMPOSITE 75% (w/setup color bar)
MODE	E-E
TAPE	-----
M.EQ	WFM

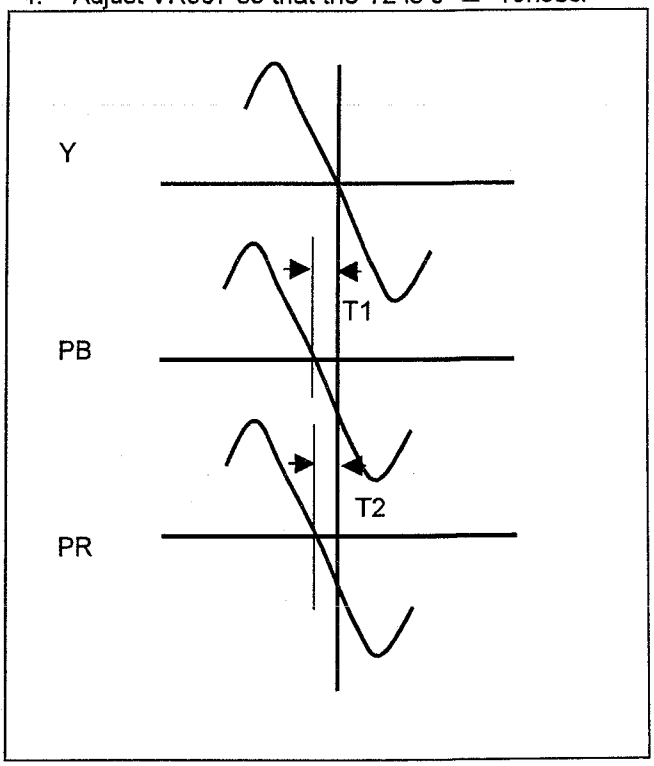
1. Adjustment VR511 so that the V is 486mV ± 7mV.



8-13. Composite YC Timing Adjustment

BOARD	V IN (F6)
SPEC.	T1 = 0 ± 10nsec T2 = 0 ± 10nsec
TEST	Y PB PR out
ADJUST	PB TIM:VR510, PR TIM:VR507
INPUT	PULSE & BAR
MODE	EE
TAPE	-----
M.EQ	WFM

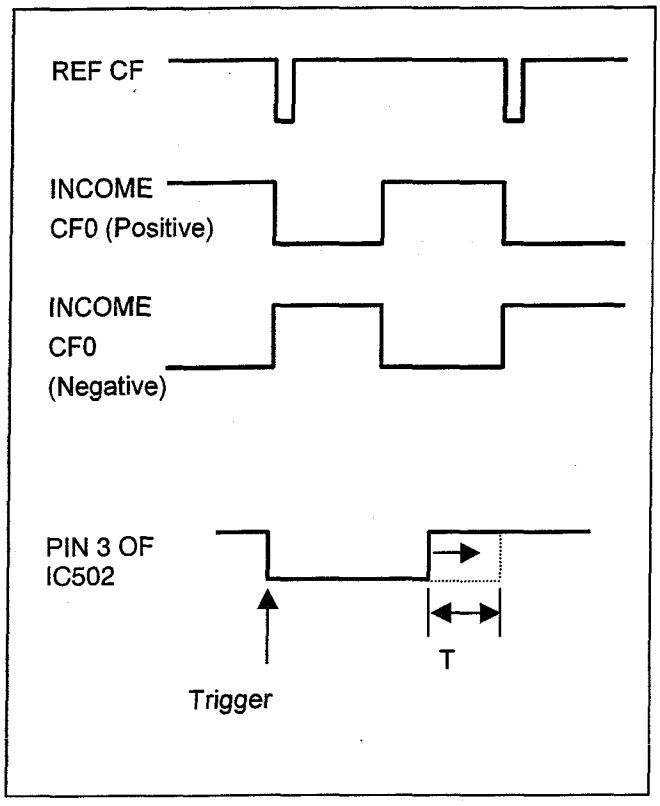
1. Set the WFM in the DIFF MODE.
2. Observe the MOD 12.5T portion.
3. Adjust VR510 so that the T1 is 0 ± 10nsec.
4. Adjust VR507 so that the T2 is 0 ± 10nsec.



8-14. Composite SCH Detection Adjustment

BOARD	V IN (F6)
SPEC.	T = 70usec ± 10usec
TEST	INCOME CF, PIN 3 of IC502
ADJUST	VR502
INPUT	COMPOSITE 100%" color bar CF PULSE
MODE	E-E
TAPE	-----
M.EQ	Oscilloscope

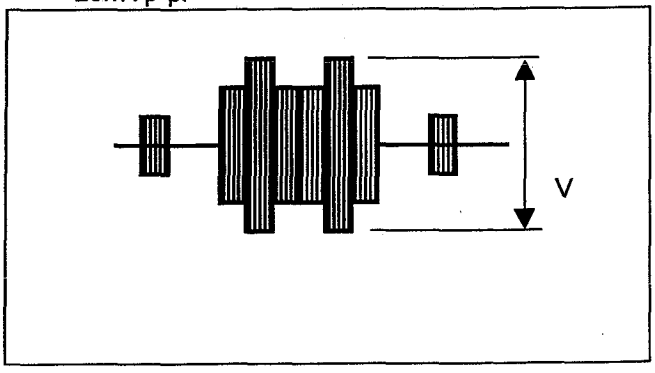
1. Set VR502 fully CCW.
2. Slowly rotate VR502 CW and set the position where the CF0 pulse just changes from the positive to negative phase.
3. Again slowly rotate VR502 CW so that T is 70usec ± 10 usec.



8-16. S-Video Color Level Adjustment

BOARD	V IN (F6)
SPEC.	V = 400mVp-p ± 20mVp-p
TEST	TP503
ADJUST	VR454
INPUT	COMPOSITE 75% (w/setup color bar)
MODE	E-E
TAPE	-----
M.EQ	WFM

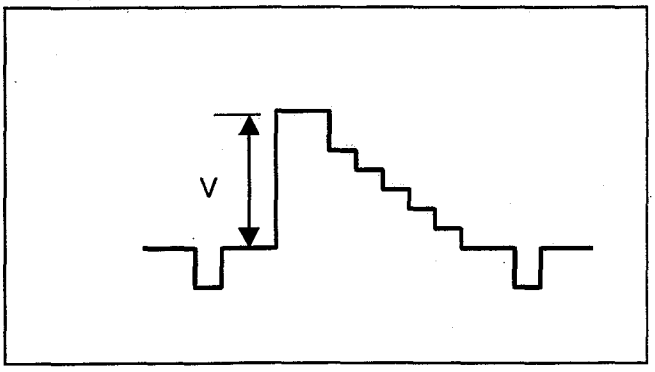
1. Adjustment VR454 so that the V is 400mVp-p ± 20mVp-p.



8-15. S-Video Y Level Adjustment

BOARD	V IN (F6)
SPEC.	V = 700mV ± 7mV
TEST	COMPONENT Y out
ADJUST	VR453
INPUT	COMPOSITE 75% (w/setup color bar)
MODE	E-E
TAPE	-----
M.EQ	WFM

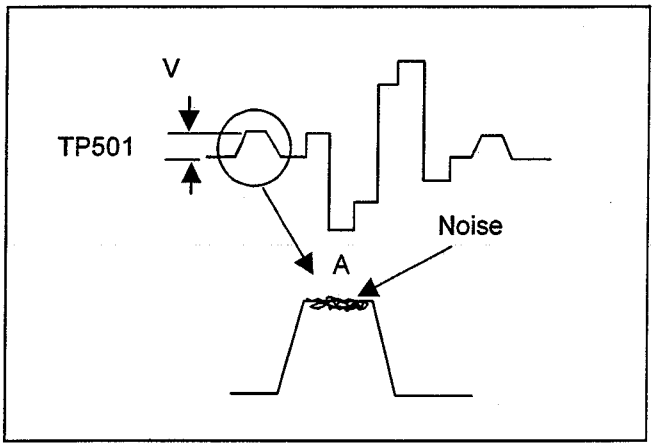
1. Adjustment VR453 so that the V is 700mV ± 7mV.

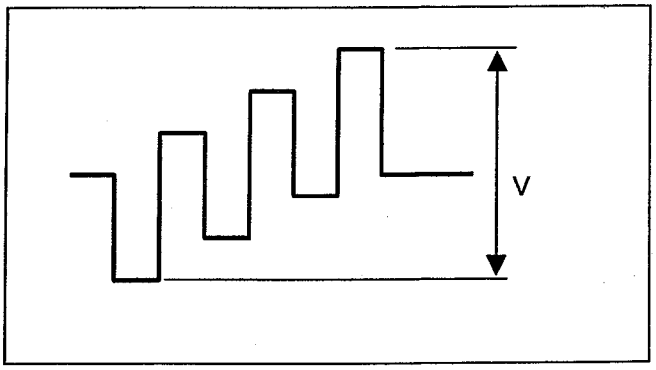


8-17. Y/C Color Demodulation Adjustment

BOARD	V IN (F6)
SPEC.	V = 0V
TEST	TP501
ADJUST	VR504, VR512
INPUT	COMPOSITE 75% (w/setup color bar)
MODE	E-E
TAPE	-----
M.EQ	Oscilloscope

1. Set VR512 at CCW position.
2. Adjust VR504 so that the noise portion is positioned on the top of A portion as shown in figure.
3. Adjust VR512 so that the level V is 0V.

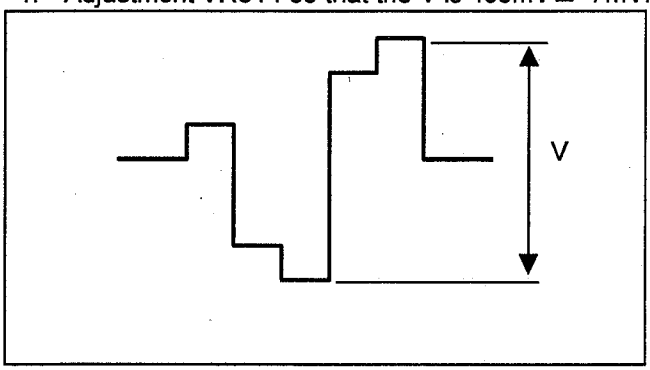




8-18. Y/C PB Level Adjustment

BOARD	V IN (F6)
SPEC.	V = 486mV ± 7mV
TEST	PB out
ADJUST	VR514
INPUT	COMPOSITE 75% (w/setup color bar)
MODE	EE
TAPE	-----
M.EQ	WFM

1. Adjustment VR514 so that the V is 486mV± 7mV.



8-19. Y/C PR Level Adjustment

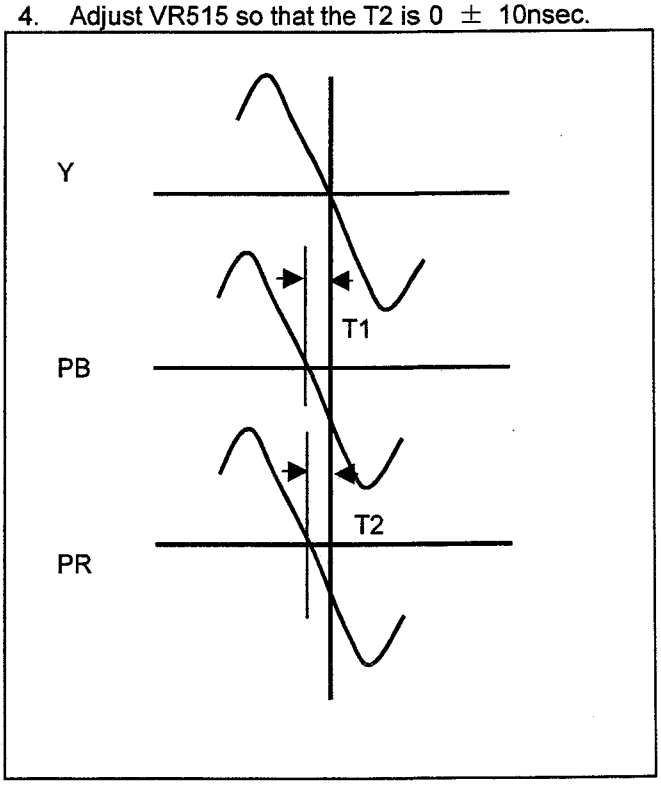
BOARD	V IN (F6)
SPEC.	V = 486mV ± 7mV
TEST	PR out
ADJUST	VR516
INPUT	COMPOSITE 75% (w/setup color bar)
MODE	E-E
TAPE	-----
M.EQ	WFM

1. Adjustment VR516 so that the V is 486mV ± 7mV.

8-20. Y/C YC Timing Adjustment

BOARD	V IN (F6)
SPEC.	T1 = 0 ± 10nsec T2 = 0 ± 10nsec
TEST	Y PB PR out
ADJUST	PB TIM:VR513, PR TIM:VR515
INPUT	PULSE & BAR
MODE	EE
TAPE	-----
M.EQ	WFM

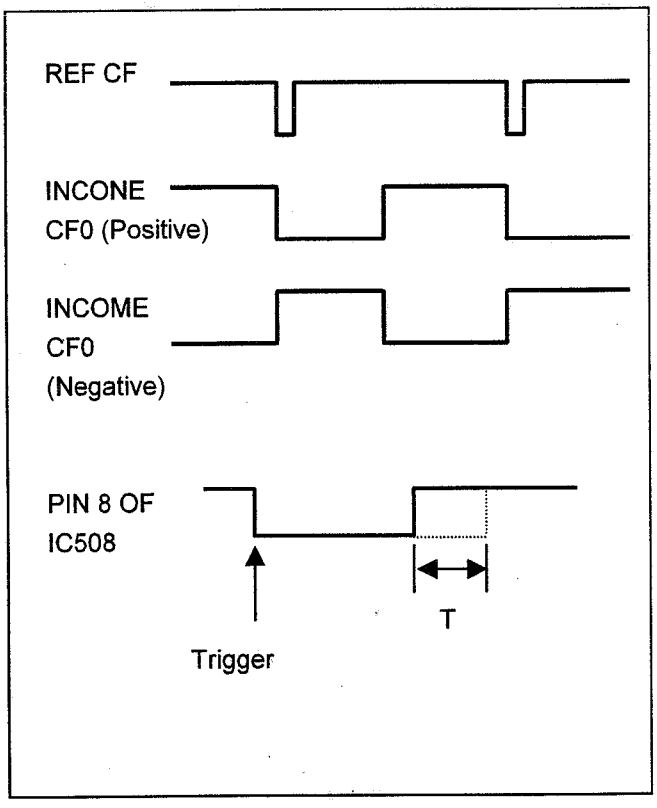
1. Set the WFM in the DIFF MODE.
2. Observe the MOD 12.5T portion.
3. Adjust VR513 so that the T1 is 0 ± 10nsec.
4. Adjust VR515 so that the T2 is 0 ± 10nsec.



8-21. Y/C SCH Detection Adjustment

BOARD	V IN (F6)
SPEC.	T = 70nsec ± 10nsec
TEST	INCOME CF, PIN 8C of P2, PIN 8 of IC508
ADJUST	VR503
INPUT	COMPOSITE 100%" color bar CF PULSE
MODE	E-E
TAPE	-----
M.EQ	Oscilloscope

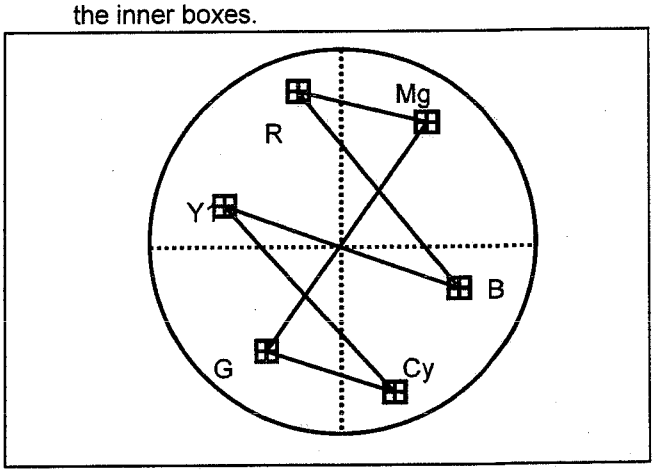
1. Set VR503 fully CCW.
2. Slowly rotate VR503 CW and set the position where the CF0 pulse just changes from the positive to negative phase.
3. Again slowly rotate VR503 CW so that T is 70nsec ± 10nsec.



8-22. Composite Vector Adjustment

BOARD	V IN (F6)
SPEC.	All Vector Dots are in Inner Boxes
TEST	COMPOSITE out
ADJUST	VR512
INPUT	COMPOSITE 75% (w/setup color bar)
MODE	E-E
TAPE	-----
M.EQ	Vector Scope

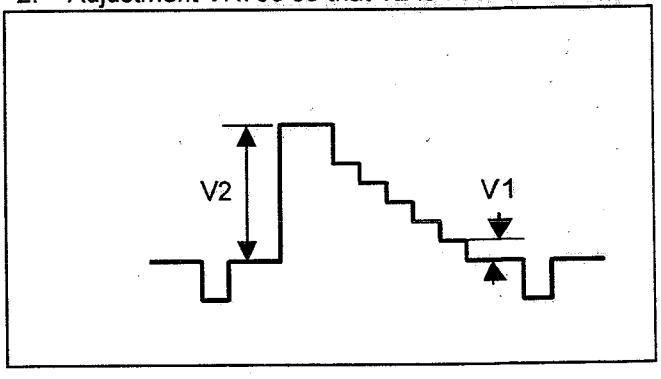
1. Adjustment VR512 so that the all vector dots are in the inner boxes.



8-23. Composite Y Level Adjustment (Without Set-up)

BOARD	V IN (F6)
SPEC.	V2 = 700mV ± 3mV, V1 = 0V ± 3mV
TEST	Y out
ADJUST	VR704, VR703
INPUT	COMPOSITE 75% (w/setup color bar)
MODE	E-E
TAPE	-----
M.EQ	WFM

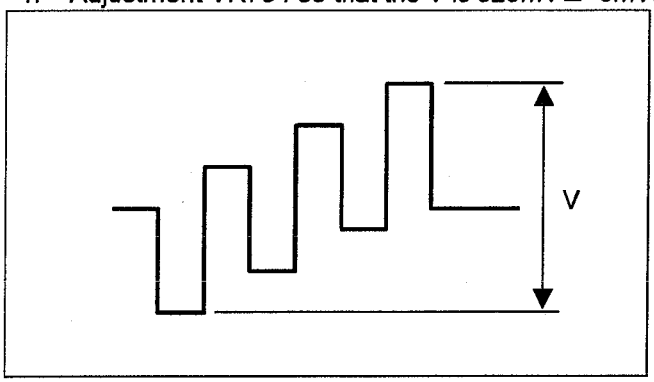
1. Adjust VR704 so that V1 is 0V ± 3mV.
2. Adjustment VR703 so that V2 is 700mV ± 3mV.



8-24. Composite PB Level Adjustment (Without Set-up)

BOARD	V IN (F6)
SPEC.	V = 525mV ± 3mV
TEST	PB out
ADJUST	VR754
INPUT	COMPOSITE 75% (w/setup color bar)
MODE	EE
TAPE	-----
M.EQ	WFM

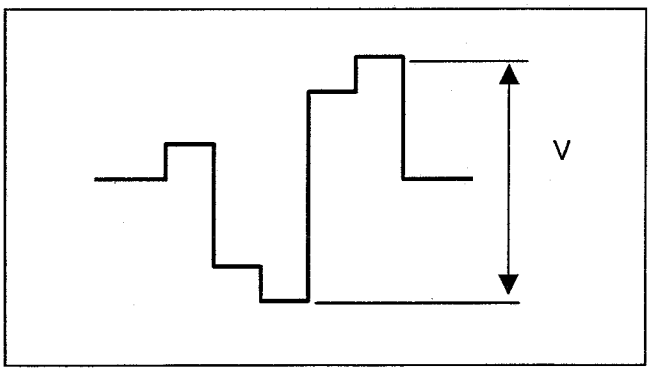
1. Adjustment VR754 so that the V is 525mV± 3mV.



8-25. Composite PR Level Adjustment (Without Set-up)

BOARD	V IN (F6)
SPEC.	V = 525mV ± 3mV
TEST	PR out
ADJUST	VR804
INPUT	COMPOSITE 75% (w/setup color bar)
MODE	E-E
TAPE	-----
M.EQ	WFM

1. Adjustment VR804 so that the V is 525mV ± 3mV.



VEP83397B

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
■	VEP83397B	F6 V IN P.C.BOARD	1	(RTL)
C1,C2	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C3	ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C4	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C5-C7	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	3	
C8	ECEV0JV330Q	E.CAPACITOR CH6.3V 33U	1	
C9	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C51	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C101,02	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C103	ECEV1CV470Q	E.CAPACITOR CH 16V 47U	1	
C104-06	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	3	
C107	ECEV0JV330Q	E.CAPACITOR CH6.3V 33U	1	
C108	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C109	ECEV1CV470Q	E.CAPACITOR CH 16V 47U	1	
C110-12	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	3	
C113	ECEV1CV470Q	E.CAPACITOR CH 16V 47U	1	
C114-16	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	3	
C117	ECEV0JV330Q	E.CAPACITOR CH6.3V 33U	1	
C118	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C119	ECEV1CV470Q	E.CAPACITOR CH 16V 47U	1	
C120	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C151-58	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	8	
C160	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C201-05	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	5	
C207-10	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	4	
C211	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C251-54	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	4	
C256-58	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	3	
C262-66	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	5	
C301	ECEV1CV100Q	E.CAPACITOR CH 16V 10U	1	
C302	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C303	ECEV1EV4R7Q	E.CAPACITOR CH 25V 4.7U	1	
C304-06	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	3	
C307	ECEV1CV100Q	E.CAPACITOR CH 16V 10U	1	
C308	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C309	ECEV1CV100Q	E.CAPACITOR CH 16V 10U	1	
C310,11	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C312	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C317	ECEV1CV100Q	E.CAPACITOR CH 16V 10U	1	
C318-21	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	4	
C351	ECEV0JV330Q	E.CAPACITOR CH6.3V 33U	1	
C352	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C353	ECEV0JV330Q	E.CAPACITOR CH6.3V 33U	1	
C354	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C355	ECEV0JV330Q	E.CAPACITOR CH6.3V 33U	1	
C356	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C357	ECEV0JV330Q	E.CAPACITOR CH6.3V 33U	1	
C358	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C359	ECEV1CV470Q	E.CAPACITOR CH 16V 47U	1	
C360	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C363-65	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	3	
C367	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C368	ECUX1H180JCN	C.CAPACITOR CH 50V 18P	1	
C370-72	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	3	
C373	ECEV0JV330Q	E.CAPACITOR CH6.3V 33U	1	
C374	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C375	ECEV0JV330Q	E.CAPACITOR CH6.3V 33U	1	
C376-83	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	8	
C401	ECEV0JV330Q	E.CAPACITOR CH6.3V 33U	1	
C402	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C403	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C404	ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C405,06	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C407	ECEV0JV330Q	E.CAPACITOR CH6.3V 33U	1	
C408	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C409	ECEV1HVR47Q	E.CAPACITOR CH 50V 0.47U	1	
C410,11	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C417	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C418	ECEV0JV330Q	E.CAPACITOR CH6.3V 33U	1	
C419	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C420	ECEV0JV330Q	E.CAPACITOR CH6.3V 33U	1	
C421	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C425	ECEV0JV330Q	E.CAPACITOR CH6.3V 33U	1	
C426	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C427,28	ECEV1HV010Q	E.CAPACITOR CH 50V 1U	2	
C429	ECEV1CV470Q	E.CAPACITOR CH 16V 47U	1	
C430	ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C431	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C432	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C433	ECUM1H152KBN	C.CAPACITOR CH 50V 1500P	1	
C434	ECEV1EV4R7Q	E.CAPACITOR CH 25V 4.7U	1	
C435	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C436,37	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C438	ECEV0JV330Q	E.CAPACITOR CH6.3V 33U	1	
C439,40	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C441	ECEV0JV330Q	E.CAPACITOR CH6.3V 33U	1	
C442,43	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C444	ECUM1H390JCN	C.CAPACITOR CH 50V 39P	1	
C445	ECUM1H080DCN	C.CAPACITOR CH 50V 8P	1	
C446	ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	
C447,48	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C449	ECEV1HN010Q	E.CAPACITOR CH 50V 1U	1	
C450	ECEV1CV470Q	E.CAPACITOR CH 16V 47U	1	
C451	ECEV0JV330Q	E.CAPACITOR CH6.3V 33U	1	
C452	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C453	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C454	ECEV0JV330Q	E.CAPACITOR CH6.3V 33U	1	
C455-57	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	3	
C458	ECEV1HV010Q	E.CAPACITOR CH 50V 1U	1	
C459,60	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C461	ECEV0JV330Q	E.CAPACITOR CH6.3V 33U	1	
C462,63	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C464-70	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	7	
C472	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C473	ECEV0JV330Q	E.CAPACITOR CH6.3V 33U	1	
C474,75	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C476	ECEV0JV330Q	E.CAPACITOR CH6.3V 33U	1	
C477	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C478	ECEV0JV330Q	E.CAPACITOR CH6.3V 33U	1	
C479	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C480	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C481	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C482	ECUM1H271JCN	C.CAPACITOR CH 50V 270P	1	
C483	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C484	ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C485	ECUM1H070DCN	C.CAPACITOR CH 50V 7P	1	
C486	ECUM1H121JCN	C.CAPACITOR CH 50V 120P	1	
C487,88	ECUM1H100DCN	C.CAPACITOR CH 50V 10P	2	
C489	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C490-92	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	3	
C493,94	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C495,96	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
C497,98	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C499	ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C501	ECEV0JV330Q	E.CAPACITOR CH6.3V 33U	1	
C502	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C503	ECEV0JV330Q	E.CAPACITOR CH6.3V 33U	1	
C504	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C505	ECEV1CV100Q	E.CAPACITOR CH 16V 10U	1	
C506	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C507	ECEV1CV100Q	E.CAPACITOR CH 16V 10U	1	
C508	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C509	ECUM1H121JCN	C.CAPACITOR CH 50V 120P	1	
C510	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C511	ECUM1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C512	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C513	ECUM1H681JCN	C.CAPACITOR CH 50V 680P	1	
C514,15	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C516	ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C518	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C519	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C520	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C521	ECUM1H271JCN	C.CAPACITOR CH 50V 270P	1	
C522	ECEV1CV470Q	E.CAPACITOR CH 16V 47U	1	
C523	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C524	ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C525	ECUM1H080DCN	C.CAPACITOR CH 50V 8P	1	

VEP83397B

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C526	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1	
C527	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
C528	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1	
C529	ECUM1H060DCN	C. CAPACITOR CH 50V 6P	1	
C530	ECUM1H561JCN	C. CAPACITOR CH 50V 560P	1	
C531, 32	ECUX1E104KBN	C. CAPACITOR CH 25V 0.1U	2	
C534	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
C536	ECUM1H220JCN	C. CAPACITOR CH 50V 22P	1	
C537	ECUM1H820JCN	C. CAPACITOR CH 50V 82P	1	
C538	ECUM1H060DCN	C. CAPACITOR CH 50V 6P	1	
C539	ECUM1H080DCN	C. CAPACITOR CH 50V 8P	1	
C540	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1	
C541	ECEV1HV4R7Q	E. CAPACITOR CH 50V 4.7U	1	
C542	ECUX1E104KBN	C. CAPACITOR CH 25V 0.1U	1	
C545	ECUX1H120JCN	C. CAPACITOR CH 50V 12P	1	
C550	ECUM1H101JCN	C. CAPACITOR CH 50V 100P	1	
C551	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C552	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1	
C553	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C554	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1	
C555	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C556	ECUM1H390JCN	C. CAPACITOR CH 50V 39P	1	
C557	ECUM1H181JCN	C. CAPACITOR CH 50V 180P	1	
C558, 59	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C560	ECEV1HN010Q	E. CAPACITOR CH 50V 1U	1	
C561	ECUM1H080DCN	C. CAPACITOR CH 50V 8P	1	
C562, 63	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2	
C565, 66	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2	
C567	ECUM1H820JCN	C. CAPACITOR CH 50V 82P	1	
C568	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
C569	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C570	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1	
C571-73	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	3	
C601	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1	
C602	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1	
C603	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C604	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1	
C605	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C606	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1	
C607	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C608	ECUM1H331JCN	C. CAPACITOR CH 50V 330P	1	
C609	ECUM1H820JCN	C. CAPACITOR CH 50V 82P	1	
C610	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C612	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1	
C613	ECEV1HN010Q	E. CAPACITOR CH 50V 1U	1	
C614	ECUM1H102JCN	C. CAPACITOR CH 50V 1000P	1	
C615	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C616	ECUM1H331JCN	C. CAPACITOR CH 50V 330P	1	
C617	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C618	ECUM1H102JCN	C. CAPACITOR CH 50V 1000P	1	
C619	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C621	ECEV1HN010Q	E. CAPACITOR CH 50V 1U	1	
C622, 23	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C624, 25	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2	
C626	ECUM1H102JCN	C. CAPACITOR CH 50V 1000P	1	
C627	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C629	ECUM1H121JCN	C. CAPACITOR CH 50V 120P	1	
C651	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1	
C652, 53	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C654	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1	
C655	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C701	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C702, 03	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	2	
C704	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C705	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1	
C706	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C707	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1	
C708, 09	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C710	ECUM1H010CCN	C. CAPACITOR CH 50V 1P	1	
C712-14	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	3	
C715	ECUX1E104KBN	C. CAPACITOR CH 25V 0.1U	1	
C716	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C717	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1	
C718	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C719	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C720, 21	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C722	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1	
C723	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C724	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1	
C725	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C726	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1	
C727	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C728	ECUX1E104KBN	C. CAPACITOR CH 25V 0.1U	1	
C730	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1	
C731	ECUX1E104KBN	C. CAPACITOR CH 25V 0.1U	1	
C732	ECUM1H331JCN	C. CAPACITOR CH 50V 330P	1	
C733	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1	
C734	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1	
C735-40	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	6	
C751	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C752, 53	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	2	
C754	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C755	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1	
C756	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C757	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1	
C758, 59	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C762-66	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	5	
C768	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C769	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1	
C770, 71	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C772	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1	
C773	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C774	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1	
C775	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C776	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C777	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C778	ECUX1E104KBN	C. CAPACITOR CH 25V 0.1U	1	
C780	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1	
C781	ECUX1E104KBN	C. CAPACITOR CH 25V 0.1U	1	
C782	ECUM1H331JCN	C. CAPACITOR CH 50V 330P	1	
C783	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1	
C784	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1	
C785-87	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	3	
C790	ECUM1H080DCN	C. CAPACITOR CH 50V 8P	1	
C791	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1	
C792	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C801	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C802, 03	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	2	
C804	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C805	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1	
C806	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C807	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1	
C808, 09	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C812-16	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	5	
C819	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1	
C820, 21	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C822	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1	
C823	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C824	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1	
C825	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C826	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C827	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C828	ECUX1E104KBN	C. CAPACITOR CH 25V 0.1U	1	
C830	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1	
C831	ECUX1E104KBN	C. CAPACITOR CH 25V 0.1U	1	
C832	ECUM1H331JCN	C. CAPACITOR CH 50V 330P	1	
C833	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1	
C834	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1	
C835-37	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	3	
C840	ECUM1H080DCN	C. CAPACITOR CH 50V 8P	1	
C841	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1	
C842	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C851-60	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	10	
C901-03	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	3	
C951	ECUM1H101JCN	C. CAPACITOR CH 50V 100P	1	
C952-56	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	5	
C957	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
C958	ECUX1E104KBN	C. CAPACITOR CH 25V 0.1U	1	
C959	ECEV1HNR47Q	E. CAPACITOR CH 50V 0.47U	1	
C960, 61	ECUX1E104KBN	C. CAPACITOR CH 25V 0.1U	2	

VEP83397B

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C962	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C963	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1	
C964,65	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C966	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1	
C967-69	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	3	
C970	ECUM1H080DCN	C. CAPACITOR CH 50V 8P	1	
C971	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1	
C972	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C973	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1	
C974	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C975	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1	
C976	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C977	ECUM1H080DCN	C. CAPACITOR CH 50V 8P	1	
C978	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1	
C979	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C980	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1	
C981,82	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C983	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1	
C984-86	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	3	
D301,02	MA152K	DIODE	2	
D351,52	MA152K	DIODE	2	
D401	MA152WK	DIODE	1	
D551	MA152WK	DIODE	1	
D601	MA335-R	DIODE	1	
D602	MA152WA	DIODE	1	
D603	MA152K	DIODE	1	
D701,02	MA152K	DIODE	2	
D751,52	MA152K	DIODE	2	
D801,02	MA152K	DIODE	2	
FL101	VLF1016A223	FILTER	1	
FL103	VLF1016A223	FILTER	1	
FL301	VLF1294	FILTER	1	
FL351	VLF1016A223	FILTER	1	
FL451	VLF1016A223	FILTER	1	
FL601,02	VLF1016A223	FILTER	2	
FL701	VLF1294	FILTER	1	
FL702	VLF1016A223	FILTER	1	
FL751	VLF1295	FILTER	1	
FL801	VLF1295	FILTER	1	
FL851,52	VLF1016A223	FILTER	2	
IC101	AN78N09	IC	1	
IC102	AN78N05	IC	1	
IC103	AN79N09	IC	1	
IC104	AN79N05	IC	1	
IC151-54	MC10H125M	IC	4	
IC156	74F244SJ	IC	1	
IC201	VSI2496	IC	1	
IC204	74ALS245ASJ	IC	1	
IC207,08	UPD71055GB	IC	2	
IC209,10	SN74S1051NS	IC	2	
IC251	VSI2153A	IC	1	
IC252	VSI2154	IC	1	
IC253	T74HCT541AF	IC	1	
IC254	T74HCT374AF	IC	1	
IC255	74F574SJ	IC	1	
IC259	T74HCT374AF	IC	1	
IC301	EL2082CS	IC	1	
IC302	NJM082BM	IC	1	
IC303	DAC10GS	IC	1	
IC351	AD818AR	IC	1	
IC352	NJM084M	IC	1	
IC353	CXD1175AM	IC	1	
IC354,55	NJM78L05UA	IC	2	
IC356	NJM79L05UA	IC	1	
IC401	UPC1862GS	IC	1	
IC402,03	NJM78L05UA	IC	2	
IC404	NJM79L05UA	IC	1	
IC405	AN91A12S	IC	1	
IC406	TC4W53F	IC	1	
IC407	MC74HC00AF	IC	1	
IC450	AD8047AR	IC	1	
IC451	UPD6486GF3BA	IC	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC452,53	UPD42280G3	IC	2	
IC454	NJM78L05UA	IC	1	
IC455	NJM79L05UA	IC	1	
IC456,57	MC74HC4053F	IC	2	
IC458,59	AD8047AR	IC	2	
IC501	SN74LS221NS	IC	1	
IC502	MM74HC221AM	IC	1	
IC503	UPD65013BC16	IC	1	
IC504,05	NJM1496M	IC	2	
IC507	MC74HC4053F	IC	1	
IC508	MC74HC04AF	IC	1	
IC509,10	NJM082BM	IC	2	
IC511	NJM78L05UA	IC	1	
IC512	NJM79L05UA	IC	1	
IC513	MM74HC221AM	IC	1	
IC514-16	MC74HC4053F	IC	3	
IC517	NJM78L05UA	IC	1	
IC518	NJM79L05UA	IC	1	
IC551	MC14538BF	IC	1	
IC552	AN91A12S	IC	1	
IC553	NJM78L05UA	IC	1	
IC554	NJM79L05UA	IC	1	
IC555	MN53015VZW	IC	1	
IC601	SN74LS221NS	IC	1	
IC602	MC74HC00AF	IC	1	
IC603	NJM082BM	IC	1	
IC604	MC74HC74AF	IC	1	
IC605	TC4S584F	IC	1	
IC606	TC4W53F	IC	1	
IC607	MC74HC244AF	IC	1	
IC608	SN74LS221NS	IC	1	
IC701	MC74HC4053F	IC	1	
IC702	AD848JR	IC	1	
IC703	NJM084M	IC	1	
IC704	CXD1175AM	IC	1	
IC705,06	NJM78L05UA	IC	2	
IC707	NJM79L05UA	IC	1	
IC751	MC74HC4053F	IC	1	
IC752	AD848JR	IC	1	
IC753	NJM084M	IC	1	
IC754	MB40568PF	IC	1	
IC755,56	NJM78L05UA	IC	2	
IC757	NJM79L05UA	IC	1	
IC758	AN78N09	IC	1	
IC759	T74HCT541AF	IC	1	
IC801	MC74HC4053F	IC	1	
IC802	AD848JR	IC	1	
IC803	NJM084M	IC	1	
IC804	MB40568PF	IC	1	
IC805,06	NJM78L05UA	IC	2	
IC807	NJM79L05UA	IC	1	
IC808	AN78N09	IC	1	
IC851	T160G41-1437	IC	1	
IC852,53	UPD42280G3	IC	2	
IC901-03	74F244SJ	IC	3	
L1,L2	VLP0133	COIL	2	
L101,02	VLP0133	COIL	2	
L301-04	VLQ0319K101	COIL 100UH	4	
L351	VLQ0163J101	COIL 100UH	1	
L352	VLQ0319K101	COIL 100UH	1	
L401	VLQ0163J150	COIL 15UH	1	
L402-05	VLQ0319K100	COIL 10UH	4	
L406	VLQ0133J471	COIL 470UH	1	
L407	VLQ0319K101	COIL 100UH	1	
L451	VLQ0319K101	COIL 100UH	1	
L452	VLQ0319K100	COIL 10UH	1	
L454	VLQ0163J270	COIL 27UH	1	
L455	VLQ0163J6R8	COIL 6.8UH	1	
L456	VLQ0163J5R6	COIL 5.6UH	1	
L457	VLQ0319K101	COIL 100UH	1	
L501-03	VLQ0319K101	COIL 100UH	3	
L505,06	VLQ0163J680	COIL 68UH	2	
L507	VLQ0319K101	COIL 100UH	1	
L553	VLQ0133J471	COIL 470UH	1	

VEP83397B

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
L601	VLQ0163J3R3	COIL 3.3UH	1	
L651, 52	VLQ0319K101	COIL 100UH	2	
L703	VLQ0319K101	COIL 100UH	1	
L704	VLQ0133J821	COIL 820UH	1	
L754	VLQ0133J821	COIL 820UH	1	
L804	VLQ0133J821	COIL 820UH	1	
P1, P2	VJP3454B096	CONNECTOR (MALE)	2	
Q301	2SB709A-R	TRANSISTOR	1	
Q302, 03	2SD601A-R	TRANSISTOR	2	
Q351	2SD601A-R	TRANSISTOR	1	
Q352	2SB709A-R	TRANSISTOR	1	
Q353	2SK198-R	TRANSISTOR	1	
Q401	2SD601A-R	TRANSISTOR	1	
Q404	2SB709A-R	TRANSISTOR	1	
Q405, 06	2SD601A-R	TRANSISTOR	2	
Q452	2SD601A-R	TRANSISTOR	1	
Q454	2SB709A-R	TRANSISTOR	1	
Q501, 02	2SD601A-R	TRANSISTOR	2	
Q503	2SB709A-R	TRANSISTOR	1	
Q504, 05	2SD601A-R	TRANSISTOR	2	
Q507, 08	2SD601A-R	TRANSISTOR	2	
Q509	2SB709A-R	TRANSISTOR	1	
Q510, 11	2SD601A-R	TRANSISTOR	2	
Q512	2SB709A-R	TRANSISTOR	1	
Q513, 14	2SD601A-R	TRANSISTOR	2	
Q515	2SB709A-R	TRANSISTOR	1	
Q516-18	2SD601A-R	TRANSISTOR	3	
Q601	2SC3757-R	TRANSISTOR	1	
Q602, 03	2SA1226	TRANSISTOR	2	
Q604	2SC3757-R	TRANSISTOR	1	
Q651	2SB709A-R	TRANSISTOR	1	
Q652	2SD601A-R	TRANSISTOR	1	
Q653	2SB709A-R	TRANSISTOR	1	
Q654	2SD601A-R	TRANSISTOR	1	
Q655	XN1213	TRANSISTOR-RESISTOR	1	
Q656	2SB709A-R	TRANSISTOR	1	
Q657	2SD601A-R	TRANSISTOR	1	
Q658	2SC3757-R	TRANSISTOR	1	
Q701	2SD601A-R	TRANSISTOR	1	
Q702	2SB709A-R	TRANSISTOR	1	
Q703	2SD601A-R	TRANSISTOR	1	
Q704	2SB709A-R	TRANSISTOR	1	
Q705	2SK198-R	TRANSISTOR	1	
Q706	2SB709A-R	TRANSISTOR	1	
Q751	2SD601A-R	TRANSISTOR	1	
Q752	2SB709A-R	TRANSISTOR	1	
Q753	2SD601A-R	TRANSISTOR	1	
Q754	2SB709A-R	TRANSISTOR	1	
Q755	2SK198-R	TRANSISTOR	1	
Q756	2SD601A-R	TRANSISTOR	1	
Q801	2SD601A-R	TRANSISTOR	1	
Q802	2SB709A-R	TRANSISTOR	1	
Q803	2SD601A-R	TRANSISTOR	1	
Q804	2SB709A-R	TRANSISTOR	1	
Q805	2SK198-R	TRANSISTOR	1	
Q806	2SD601A-R	TRANSISTOR	1	
QR201	MUN2212	TRANSISTOR-RESISTOR	1	
QR551	MUN2212	TRANSISTOR-RESISTOR	1	
QR701, 02	MUN2213	TRANSISTOR-RESISTOR	2	
QR751	MUN2213	TRANSISTOR-RESISTOR	1	
QR801	MUN2213	TRANSISTOR-RESISTOR	1	
R7-34	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	28	
R37-53	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	17	
R56-61	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	6	
R151-62	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	12	
R163	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R166	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R168, 69	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2	
R201, 02	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2	
R208	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R214, 15	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R216	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R251	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R301	ERJ6GEYG562	M. RESISTOR CH 1/10W 5.6K	1	
R302	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R303	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R304, 05	ERJ6GEYG331	M. RESISTOR CH 1/10W 330	2	
R306, 07	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	2	
R308	ERJ6GEYF561	M. RESISTOR CH 1/10W 560	1	
R309	ERJ6GEYG183	M. RESISTOR CH 1/10W 18K	1	
R310	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R311	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R312	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R315, 16	ERJ6GEYF822	M. RESISTOR CH 1/10W 8.2K	2	
R317	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R318	ERJ6GEYF333	M. RESISTOR CH 1/10W 33K	1	
R352	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R354	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	1	
R355	ERJ6GEYF561	M. RESISTOR CH 1/10W 560	1	
R358	ERJ6GEYG122	M. RESISTOR CH 1/10W 1.2K	1	
R359	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R360	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R361	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R362	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R363	ERJ6GEYG394	M. RESISTOR CH 1/10W 390K	1	
R364	ERJ6GEYG154	M. RESISTOR CH 1/10W 150K	1	
R365	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R366	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R369	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R370	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R371	ERJ6GEYG682	M. REISITOR CH 1/10W 6.8K	1	
R401	ERJ6GEYG681	M. RESISTOR CH 1/10W 680	1	
R402	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R403	ERJ6GEYG681	M. RESISTOR CH 1/10W 680	1	
R404	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R407	ERJ6GEYG105	M. RESISTOR CH 1/10W 1M	1	
R412	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R413	ERJ6GEYF333	M. RESISTOR CH 1/10W 33K	1	
R414	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R415	ERJ6GEYG221	M. RESISTOR CH 1/10W 220	1	
R416	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
R417	ERJ6GEYG221	M. RESISTOR CH 1/10W 220	1	
R418	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
R419	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1	
R420	ERJ6GEYG272	M. RESISTOR CH 1/10W 2.7K	1	
R421	ERJ6GEYG271	M. RESISTOR CH 1/10W 270	1	
R422	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
R423, 24	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2	
R425	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	1	
R426	ERJ6GEYF822	M. RESISTOR CH 1/10W 8.2K	1	
R431	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R432	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R433, 34	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	2	
R435	ERJ6GEYG221	M. RESISTOR CH 1/10W 220	1	
R436	ERJ6GEYJ224	M. RESISTOR CH 1/10W 220K	1	
R437	ERJ6GEYJ684	M. RESISTOR CH 1/10W 680K	1	
R438-40	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	3	
R441	ERJ6GEYG562	M. RESISTOR CH 1/10W 5.6K	1	
R451	ERJ6GEYJ151	M. RESISTOR CH 1/10W 150	1	
R452	ERJ6GEYG332	M. RESISTOR CH 1/10W 3.3K	1	
R453	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R454	ERJ6GEYG330	M. RESISTOR CH 1/10W 33	1	
R455, 56	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	2	
R457-60	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	4	
R463	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R465	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R466	ERJ6RBD182	M. RESISTOR CH 1/10W 1.8K	1	
R467	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R468	ERJ6GEYG391	M. RESISTOR CH 1/10W 390	1	
R469	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R471	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R473	ERJ6GEYG331	M. RESISTOR CH 1/10W 330	1	
R474	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R475	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R479	ERJ6GEYG221	M. RESISTOR CH 1/10W 220	1	
R480	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	

VEP83397B

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R481	ERJ6GEYG331	M. RESISTOR CH 1/10W 330	1	
R482	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R483-86	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	4	
R487	ERJ6GEYG331	M. RESISTOR CH 1/10W 330	1	
R489	ERJ6GEYG821	M. RESISTOR CH 1/10W 820	1	
R491	ERJ6GEYG681	M. RESISTOR CH 1/10W 680	1	
R492	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R493	ERJ6GEYG821	M. RESISTOR CH 1/10W 820	1	
R494	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R495	ERJ6GEYG391	M. RESISTOR CH 1/10W 390	1	
R501	ERJ6GEYG183	M. RESISTOR CH 1/10W 18K	1	
R502	ERJ6GEYF333	M. RESISTOR CH 1/10W 33K	1	
R503	ERJ6GEYG223	M. RESISTOR CH 1/10W 22K	1	
R504	ERJ6GEYJ471	M. RESISTOR CH 1/10W 470	1	
R505, 06	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	2	
R510, 11	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	2	
R512	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R513	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	1	
R514	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R515	ERJ6GEYG823	M. RESISTOR CH 1/10W 82K	1	
R516	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R517	ERJ6GEYF561	M. RESISTOR CH 1/10W 560	1	
R518	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R519	ERJ6GEYF822	M. RESISTOR CH 1/10W 8.2K	1	
R520, 21	ERJ6GEYG332	M. RESISTOR CH 1/10W 3.3K	2	
R522, 23	ERJ6GEYG121	M. RESISTOR CH 1/10W 120	2	
R524	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R525	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
R526	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R527	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	1	
R528	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1	
R529	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	1	
R530	ERJ6GEYG181	M. RESISTOR CH 1/10W 180	1	
R531	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1	
R532	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R533	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	1	
R534	ERJ6GEYF123	M. RESISTOR CH 1/10W 12K	1	
R535	ERJ6GEYJ471	M. RESISTOR CH 1/10W 470	1	
R537	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R538	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	1	
R539	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R540	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R542	ERJ6GEYG821	M. RESISTOR CH 1/10W 820	1	
R543, 44	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	2	
R545	ERJ6GEYF822	M. RESISTOR CH 1/10W 8.2K	1	
R546, 47	ERJ6GEYG332	M. RESISTOR CH 1/10W 3.3K	2	
R548, 49	ERJ6GEYG121	M. RESISTOR CH 1/10W 120	2	
R550	ERJ6GEYG153	M. RESISTOR CH 1/10W 15K	1	
R558	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
R559	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R560, 61	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	2	
R562	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
R565	ERJ6GEYJ224	M. RESISTOR CH 1/10W 220K	1	
R566	ERJ6GEYJ684	M. RESISTOR CH 1/10W 680K	1	
R567-70	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	4	
R601	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R602	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
R603	ERJ6GEYG682	M. REISITOR CH 1/10W 6.8K	1	
R604	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	1	
R605	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R606, 07	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	2	
R608, 09	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	2	
R610	ERJ6GEYG392	M. RESISTOR CH 1/10W 3.9K	1	
R611	ERJ6GEYG332	M. RESISTOR CH 1/10W 3.3K	1	
R612, 13	ERJ6GEYG682	M. REISITOR CH 1/10W 6.8K	2	
R614	ERJ6GEYG223	M. RESISTOR CH 1/10W 22K	1	
R615	ERJ6GEYG682	M. REISITOR CH 1/10W 6.8K	1	
R616	ERJ6GEYG223	M. RESISTOR CH 1/10W 22K	1	
R617	ERJ6GEYG332	M. RESISTOR CH 1/10W 3.3K	1	
R618	ERJ6GEYG153	M. RESISTOR CH 1/10W 15K	1	
R619	ERJ6GEYG681	M. RESISTOR CH 1/10W 680	1	
R620, 21	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	2	
R622	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R623	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1	
R624	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	1	

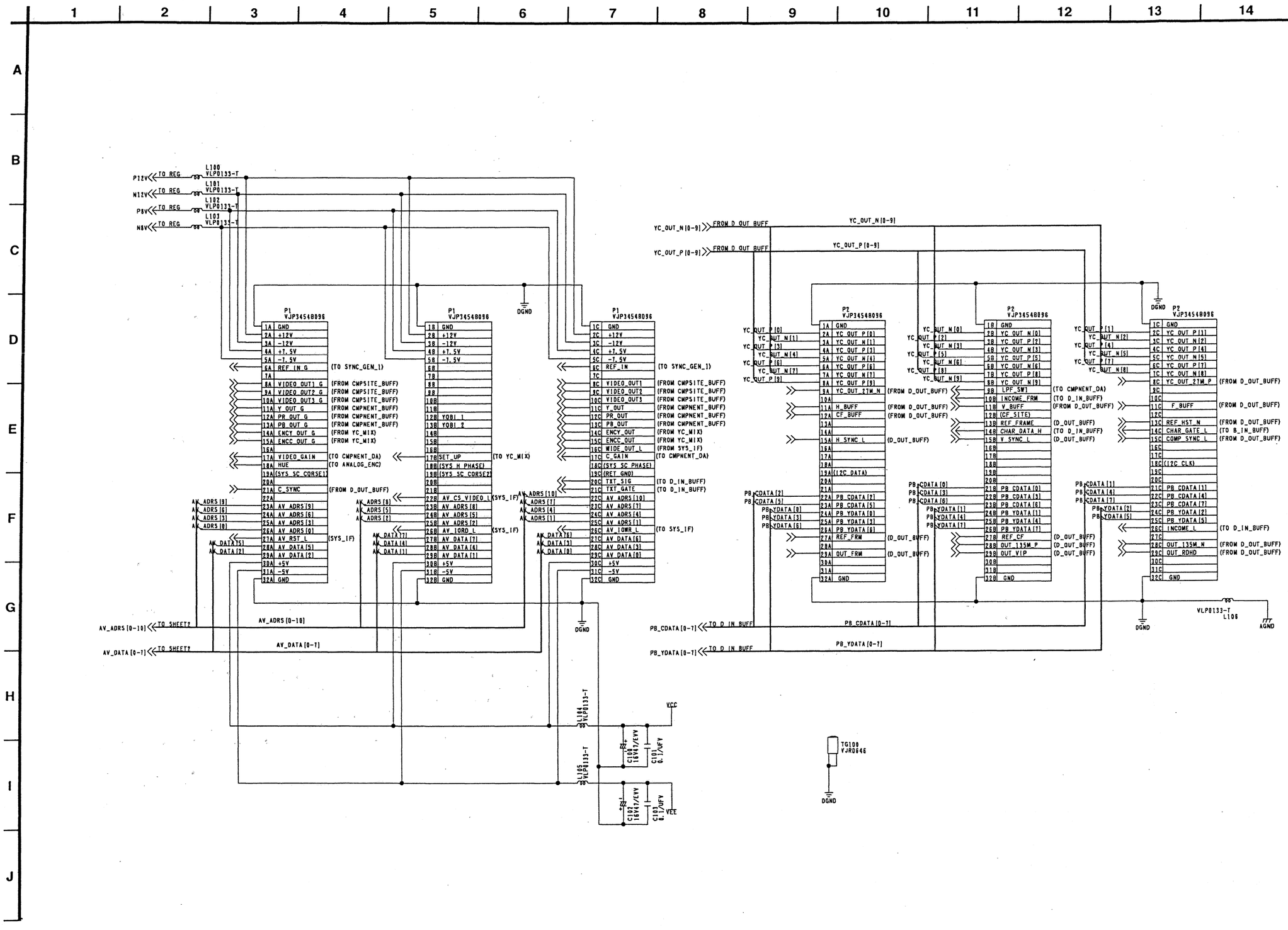
Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R625	ERJ6GEYG683	M. RESISTOR CH 1/10W 68K	1	
R626	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R631	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R651	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	1	
R652	ERJ6GEYG562	M. RESISTOR CH 1/10W 5.6K	1	
R653	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	1	
R657	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R658	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	1	
R659	ERJ6GEYG122	M. RESISTOR CH 1/10W 1.2K	1	
R660	ERJ6GEYG272	M. RESISTOR CH 1/10W 2.7K	1	
R661	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	1	
R663	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R664	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	1	
R665	ERJ6RBD122	M. RESISTOR CH 1/10W 1.2K	1	
R666	ERJ6GEYG272	M. RESISTOR CH 1/10W 2.7K	1	
R667	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	1	
R668	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R669	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R670	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
R671, 72	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2	
R701	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R702	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R703	ERJ6GEYG331	M. RESISTOR CH 1/10W 330	1	
R704	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	1	
R707	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R708	ERJ6GEYG181	M. RESISTOR CH 1/10W 180	1	
R711	ERJ6GEYG122	M. RESISTOR CH 1/10W 1.2K	1	
R712	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R713	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R714	ERJ6GEYF333	M. RESISTOR CH 1/10W 33K	1	
R715, 16	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	2	
R717	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R718	ERJ6GEYG394	M. RESISTOR CH 1/10W 390K	1	
R719	ERJ6GEYG154	M. RESISTOR CH 1/10W 150K	1	
R720, 21	ERJ6GEYG105	M. RESISTOR CH 1/10W 1M	2	
R722	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R723	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R724	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
R725	ERJ6GEYG122	M. RESISTOR CH 1/10W 1.2K	1	
R726	ERJ6GEYG331	M. RESISTOR CH 1/10W 330	1	
R727	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R728	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R729	ERJ6GEYG221	M. RESISTOR CH 1/10W 220	1	
R730	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	1	
R731	ERJ6GEYF822	M. RESISTOR CH 1/10W 8.2K	1	
R751	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R752	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	1	
R753	ERJ6GEYJ471	M. RESISTOR CH 1/10W 470	1	
R754	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	1	
R757	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R758	ERJ6GEYG391	M. RESISTOR CH 1/10W 390	1	
R761	ERJ6GEYG122	M. RESISTOR CH 1/10W 1.2K	1	
R762	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R763, 64	ERJ6GEYF123	M. RESISTOR CH 1/10W 12K	2	
R765, 66	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	2	
R767	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R768	ERJ6GEYG394	M. RESISTOR CH 1/10W 390K	1	
R769	ERJ6GEYJ274	M. RESISTOR CH 1/10W 270K	1	
R770, 71	ERJ6GEYG105	M. RESISTOR CH 1/10W 1M	2	
R772	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R773	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R774	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
R775	ERJ6GEYG272	M. RESISTOR CH 1/10W 2.7K	1	
R776	ERJ6GEYJ471	M. RESISTOR CH 1/10W 470	1	
R777	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	1	
R778	ERJ6GEYG331	M. RESISTOR CH 1/10W 330	1	
R779	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	1	
R780	ERJ6GEYF561	M. RESISTOR CH 1/10W 560	1	
R781	ERJ6GEYG682	M. REISITOR CH 1/10W 6.8K	1	
R782	ERJ6GEYG273	M. RESISTOR CH 1/10W 27K	1	
R783	ERJ6GEYG272	M. RESISTOR CH 1/10W 2.7K	1	
R801	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R802	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	1	
R803	ERJ6GEYJ471	M. RESISTOR CH 1/10W 470	1	
R804	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	1	

VEP83397B

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R807	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R808	ERJ6GEYG391	M. RESISTOR CH 1/10W 390	1	
R811	ERJ6GEYG122	M. RESISTOR CH 1/10W 1.2K	1	
R812	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R813, 14	ERJ6GEYF123	M. RESISTOR CH 1/10W 12K	2	
R815, 16	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	2	
R817	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R818	ERJ6GEYG394	M. RESISTOR CH 1/10W 390K	1	
R819	ERJ6GEYJ274	M. RESISTOR CH 1/10W 270K	1	
R820, 21	ERJ6GEYG105	M. RESISTOR CH 1/10W 1M	2	
R822	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R823	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R824	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
R825	ERJ6GEYG272	M. RESISTOR CH 1/10W 2.7K	1	
R826	ERJ6GEYJ471	M. RESISTOR CH 1/10W 470	1	
R827	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	1	
R828	ERJ6GEYG331	M. RESISTOR CH 1/10W 330	1	
R829	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	1	
R830	ERJ6GEYF561	M. RESISTOR CH 1/10W 560	1	
R831	ERJ6GEYG682	M. REISITOR CH 1/10W 6.8K	1	
R832	ERJ6GEYG273	M. RESISTOR CH 1/10W 27K	1	
R833	ERJ6GEYG272	M. RESISTOR CH 1/10W 2.7K	1	
R854-61	ERJ6GEYG332	M. RESISTOR CH 1/10W 3.3K	8	
R862-68	ERJ6GEYG391	M. RESISTOR CH 1/10W 390	7	
R869	ERJ6GEYG332	M. RESISTOR CH 1/10W 3.3K	1	
R872	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R875	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R901-03	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	3	
R930	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1	
R931, 32	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	2	
R933	ERJ6GEYG391	M. RESISTOR CH 1/10W 390	1	
R934	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1	
R935	ERJ6GEYG332	M. RESISTOR CH 1/10W 3.3K	1	
R936	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R937	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	1	
R938	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R939	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1	
R940, 41	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	2	
R942	ERJ6GEYG391	M. RESISTOR CH 1/10W 390	1	
R943	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1	
R944	ERJ6GEYG332	M. RESISTOR CH 1/10W 3.3K	1	
R945	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R946	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	1	
R947	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R948, 49	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2	
R950	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
R951	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R952	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
R953	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R954	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	1	
R955	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1	
R956	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	1	
R957	ERJ6GEYG181	M. RESISTOR CH 1/10W 180	1	
R958	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1	
R959	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R960	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	1	
R961	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R962, 63	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2	
R965	ERJ6GEYJ274	M. RESISTOR CH 1/10W 270K	1	
R967	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R968	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R969	ERJ6GEYF333	M. RESISTOR CH 1/10W 33K	1	
R970	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R973, 74	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2	
R975, 76	ERJ6GEYG332	M. RESISTOR CH 1/10W 3.3K	2	
R979	ERJ6GEYG272	M. RESISTOR CH 1/10W 2.7K	1	
R980	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R981	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R982	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R983	ERJ6GEYG394	M. RESISTOR CH 1/10W 390K	1	
R984	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R985	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	1	
R986, 87	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2	
R988	ERJ6GEYG563	M. RESISTOR CH 1/10W 56K	1	
R989	ERJ6GEYF561	M. RESISTOR CH 1/10W 560	1	

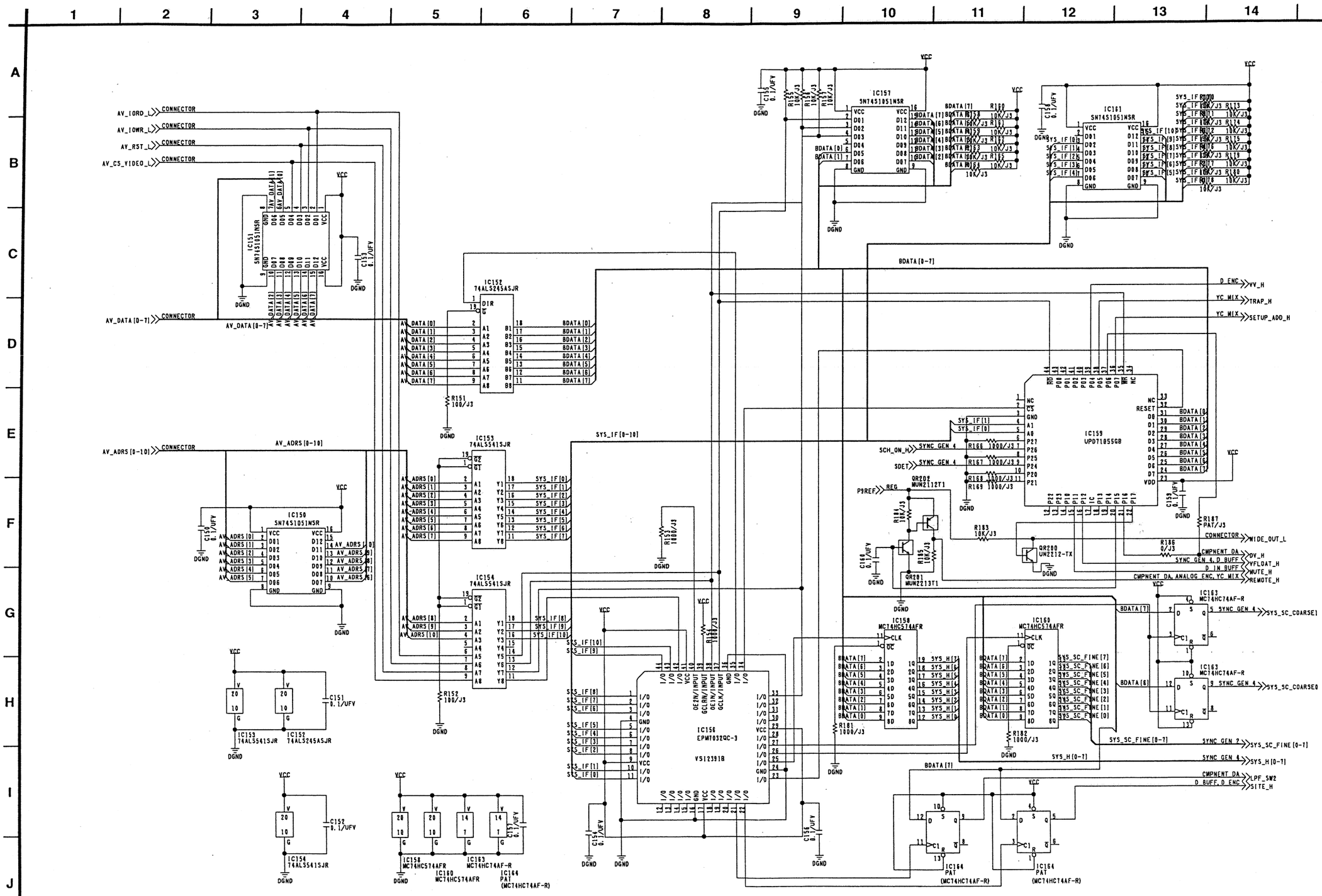
Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R990	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R991	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R992	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
TG1-G6	VJR0648	TEST POINT	6	
TP351	VJR0646	TEST POINT	1	
TP501	VJR0648	TEST POINT	1	
TP502	EYF6CU	TEST POINT	1	
TP503, 04	VJR0646	TEST POINT	2	
TP601-03	VJR0648	TEST POINT	3	
TP701	VJR0646	TEST POINT	1	
TP751	VJR0646	TEST POINT	1	
TP801	VJR0646	TEST POINT	1	
VL601	VLQ0415	COIL	1	
VR301	VRV0064B502	V. RESISTOR 5K	1	
VR351	VRV0064B502	V. RESISTOR 5K	1	
VR451, 52	VRV0112B101	V. RESISTOR 100K	2	
VR453, 54	VRV0064B501	V. RESISTOR 500	2	
VR501	VRV0064B502	V. RESISTOR 5K	1	
VR502, 03	VRV0064B102	V. RESISTOR 1K	2	
VR504	VRV0064B502	V. RESISTOR 5K	1	
VR505	VRV0064B102	V. RESISTOR 1K	1	
VR507	VRV0064B102	V. RESISTOR 1K	1	
VR510, 11	VRV0064B102	V. RESISTOR 1K	2	
VR512	VRV0064B502	V. RESISTOR 5K	1	
VR513-16	VRV0064B102	V. RESISTOR 1K	4	
VR601	VRV0064B202	V. RESISTOR 2K	1	
VR602	VRV0064B502	V. RESISTOR 5K	1	
VR701	VRV0064B102	V. RESISTOR 1K	1	
VR702	VRV0064B502	V. RESISTOR 5K	1	
VR703	VRV0064B102	V. RESISTOR 1K	1	
VR704	VRV0064B103	V. RESISTOR 10K	1	
VR751	VRV0064B102	V. RESISTOR 1K	1	
VR752	VRV0064B502	V. RESISTOR 5K	1	
VR753	VRV0064B102	V. RESISTOR 1K	1	
VR754	VRV0064B502	V. RESISTOR 5K	1	
VR801	VRV0064B102	V. RESISTOR 1K	1	
VR802	VRV0064B502	V. RESISTOR 5K	1	
VR803	VRV0064B102	V. RESISTOR 1K	1	
VR804	VRV0064B502	V. RESISTOR 5K	1	
X402	VSX0330	CRYSTAL OSCILLATOR	1	
X501	VSX033B	CRYSTAL OSCILLATOR	1	

V OUT CONNECTR (F4 1/16) SCHEMATIC DIAGRAM



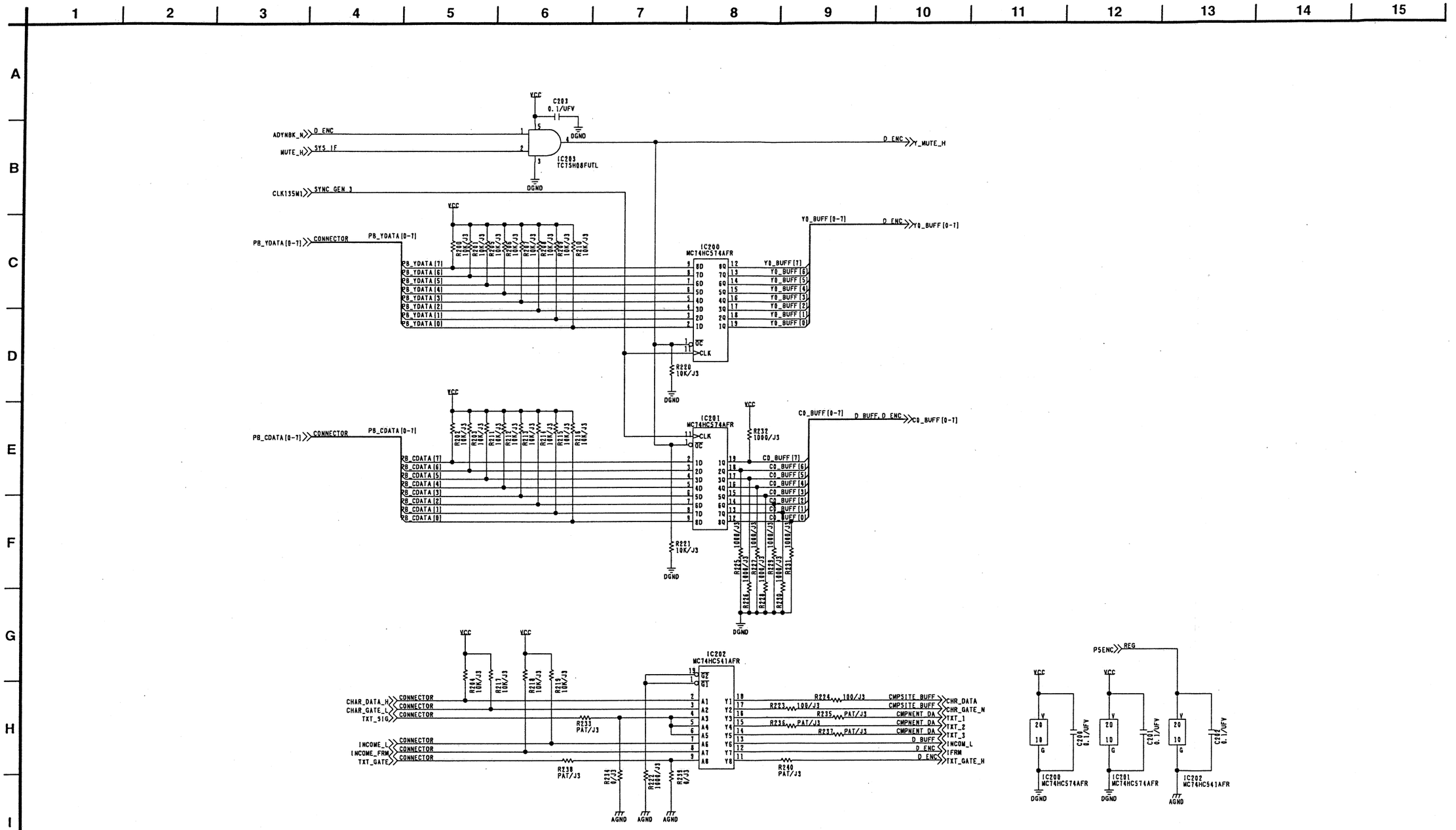
2–45

V OUT SYS IF (F4 2/16) SCHEMATIC DIAGRAM



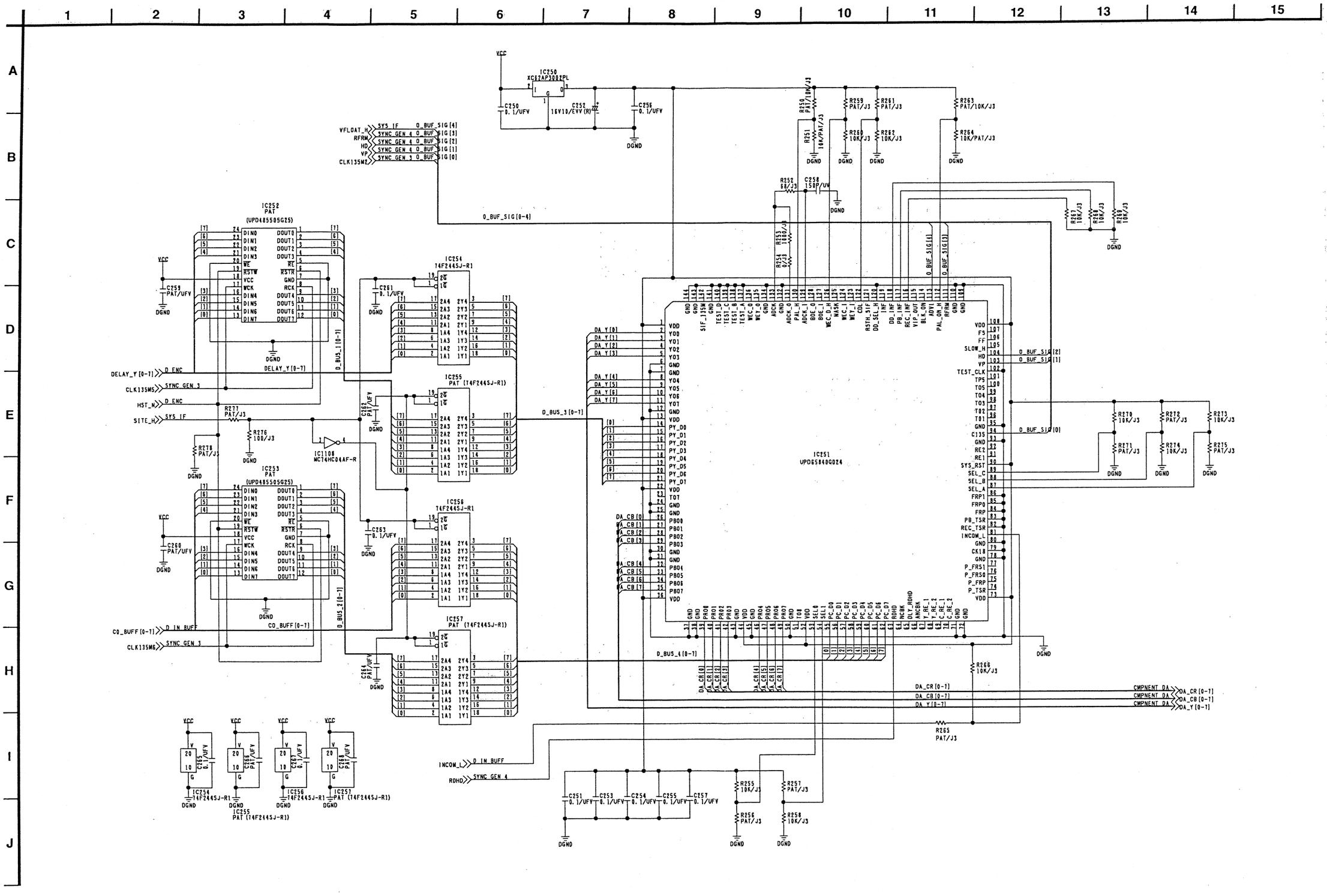
2–46

V OUT D IN BUFF (F4 3/16) SCHEMATIC DIAGRAM



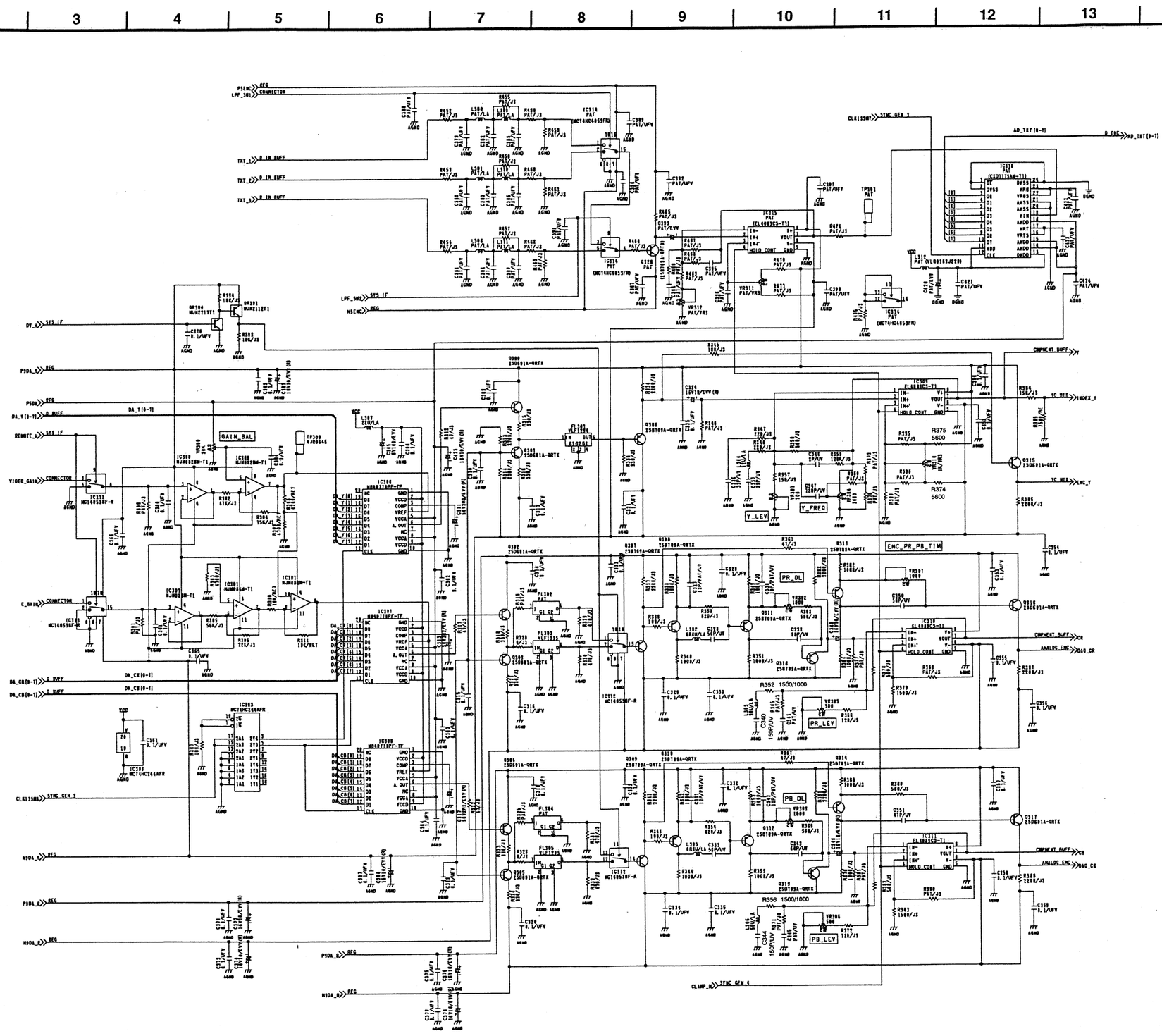
2–47

V OUT D BUFF (F4 4/16) SCHEMATIC DIAGRAM



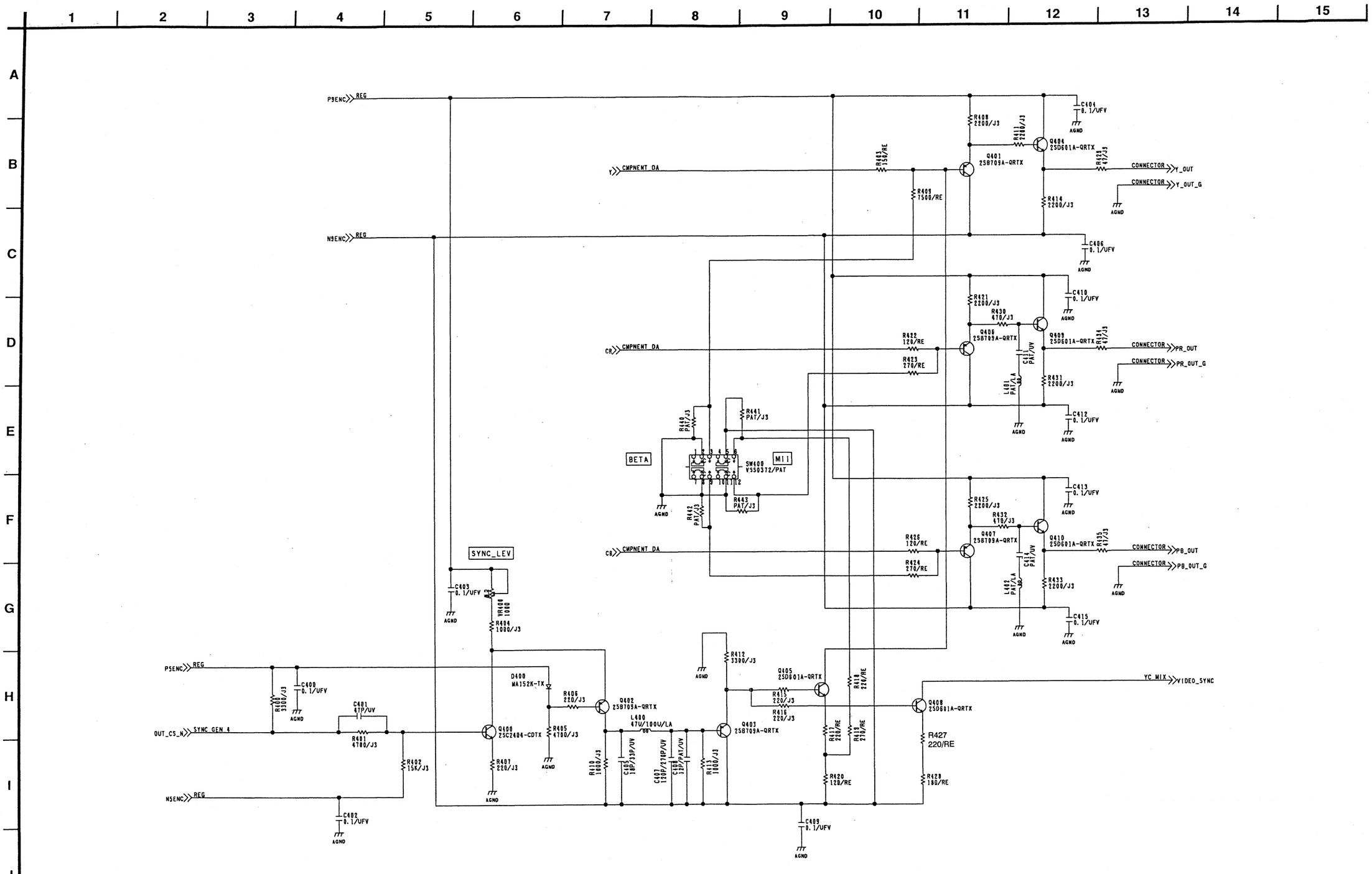
2–48

V OUT CMPNENT DA (F4 5/16) SCHEMATIC DIAGRAM



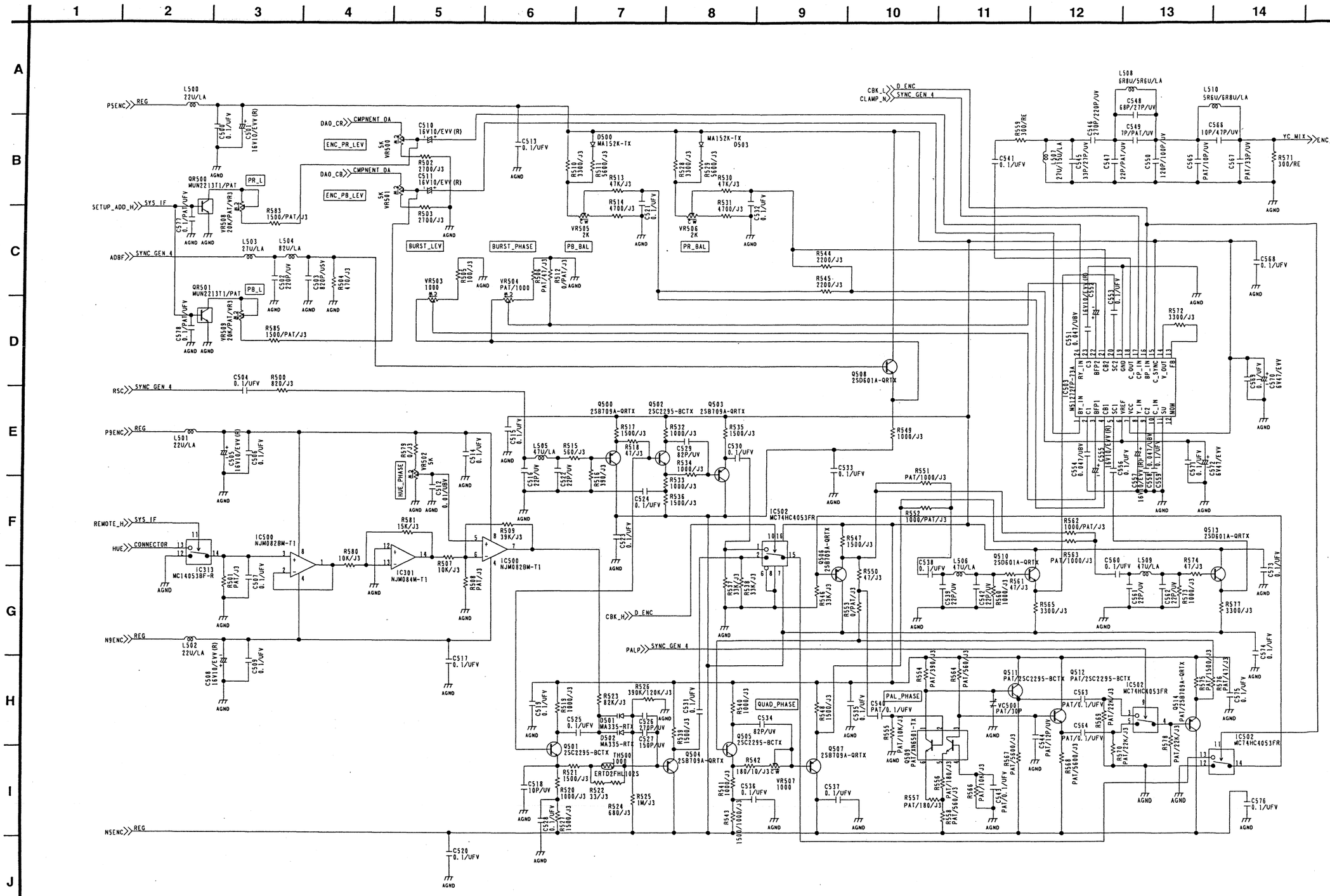
2–49

V OUT CMPNENT BUFF (F4 6/16) SCHEMATIC DIAGRAM



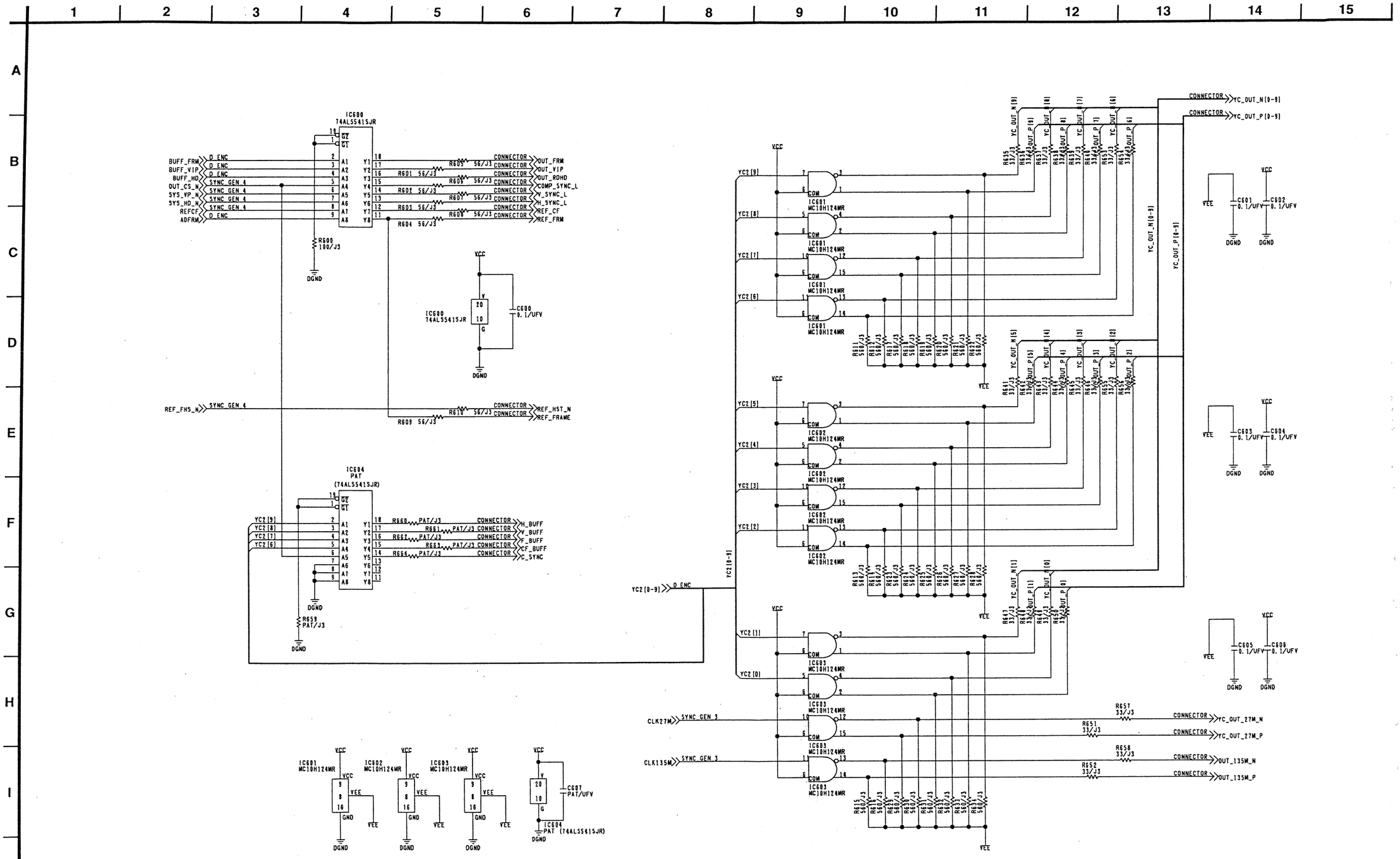
2–50

V OUT ANALOG ENC (F4 7/16) SCHEMATIC DIAGRAM



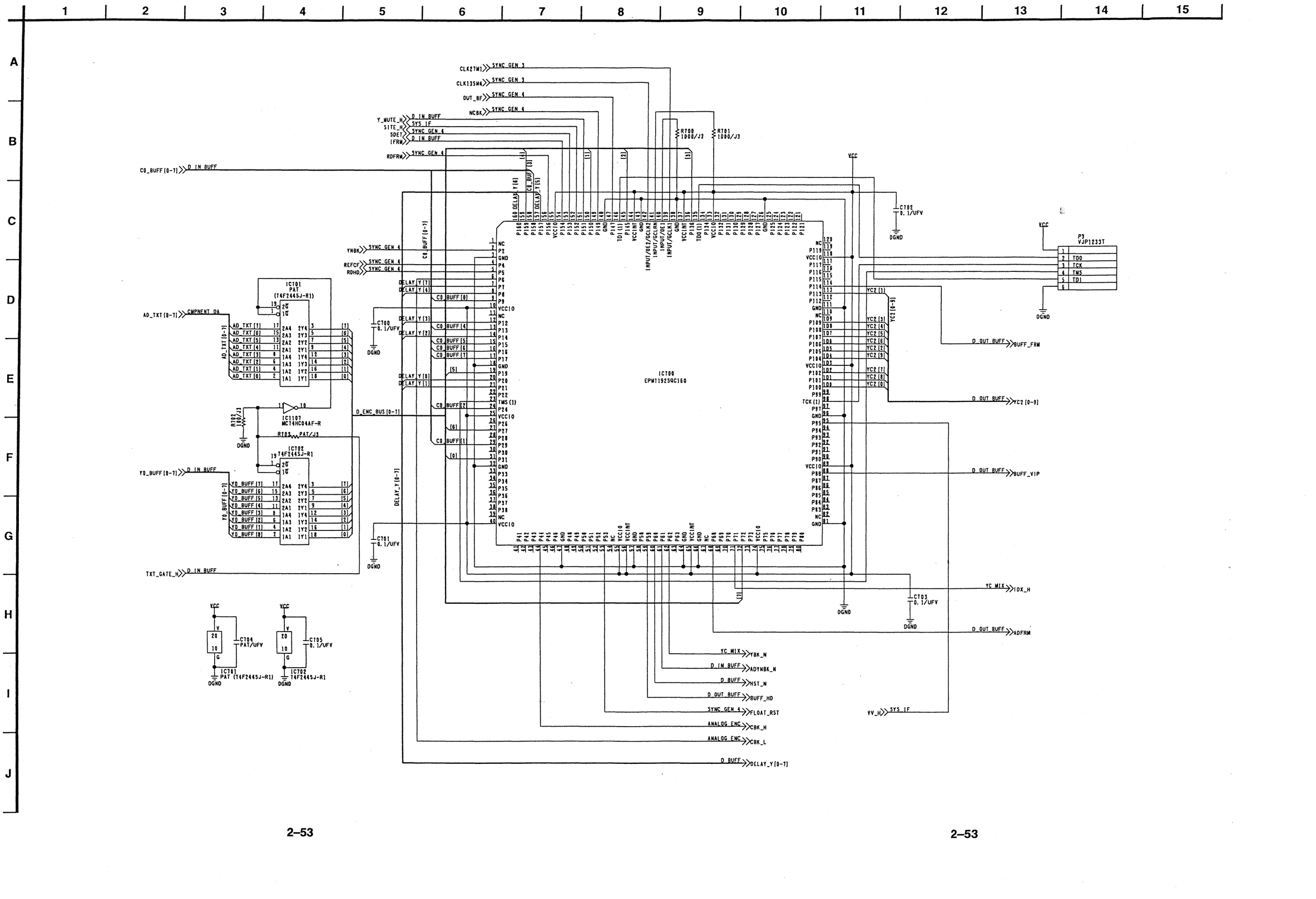
2–51

V OUT D OUT BUFF (F4 8/16) SCHEMATIC DIAGRAM



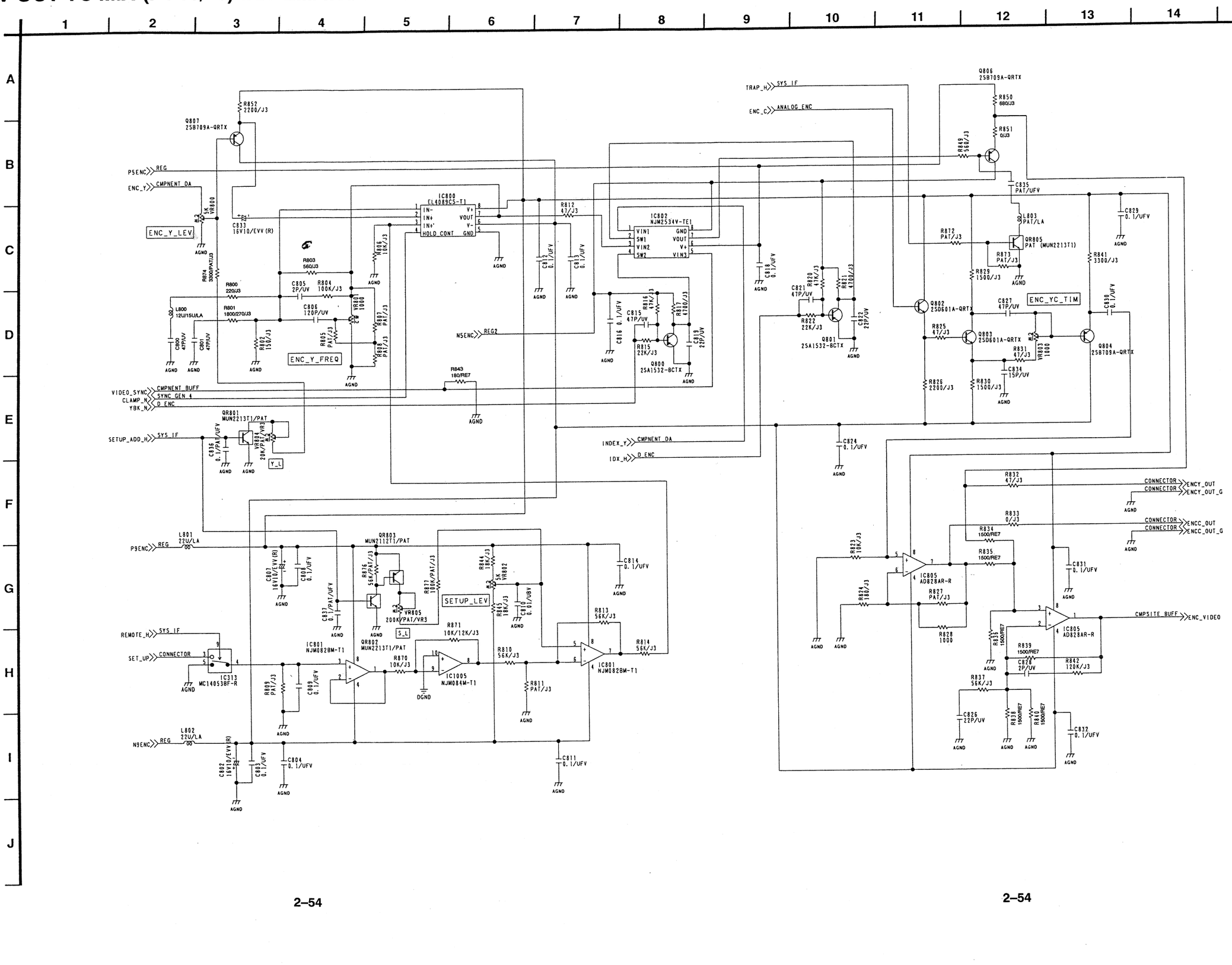
2–52

V OUT D ENC (F4 9/16) SCHEMATIC DIAGRAM



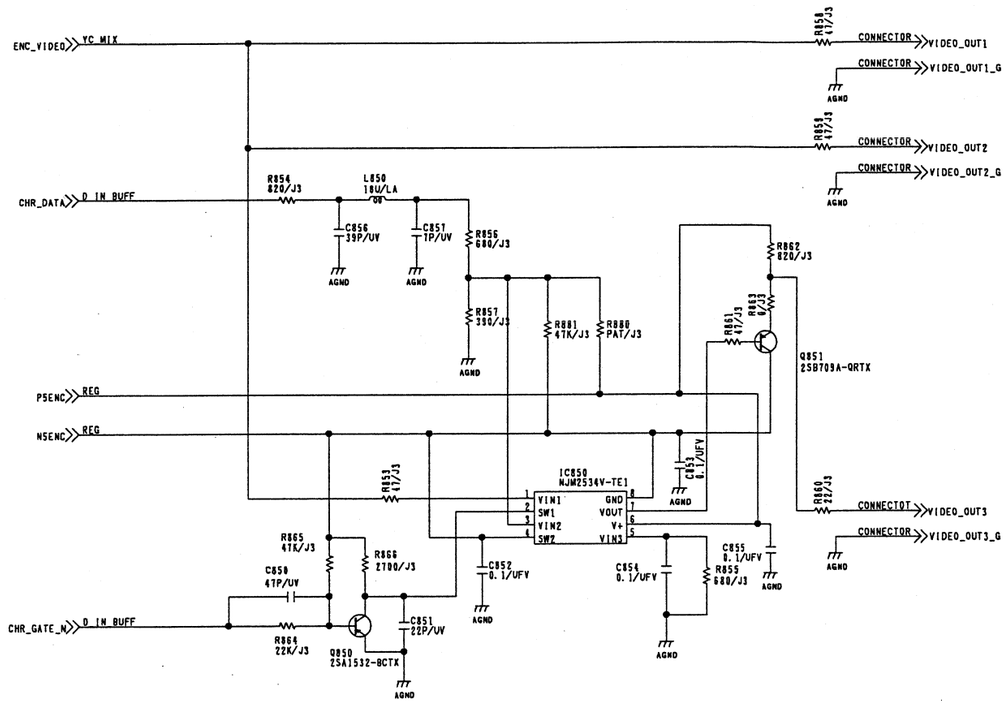
2–53

V OUT YC MIX (F4 10/16) SCHEMATIC DIAGRAM



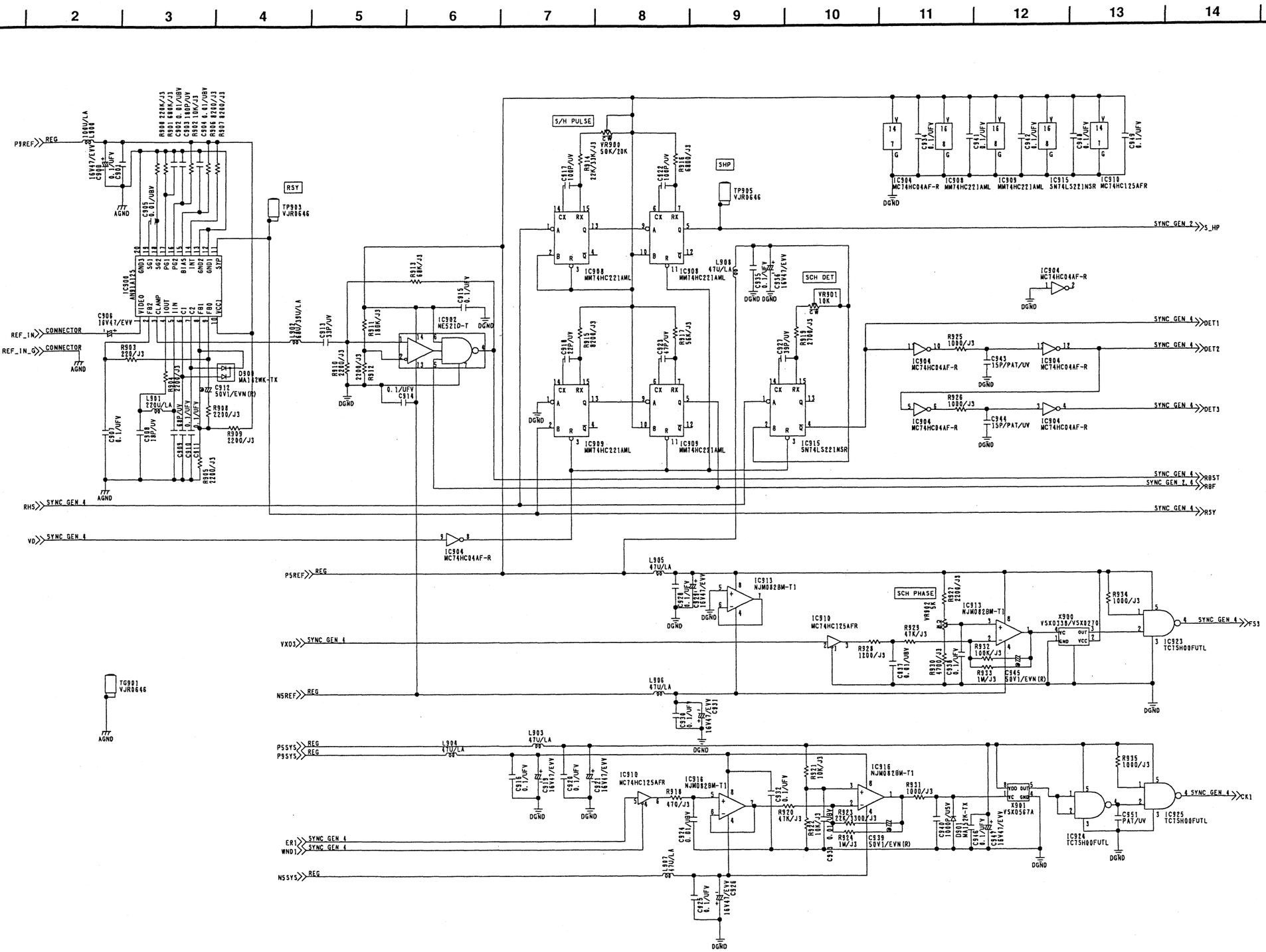
2–54

V OUT CMPSITE BUFF (F4 11/16) SCHEMATIC DIAGRAM



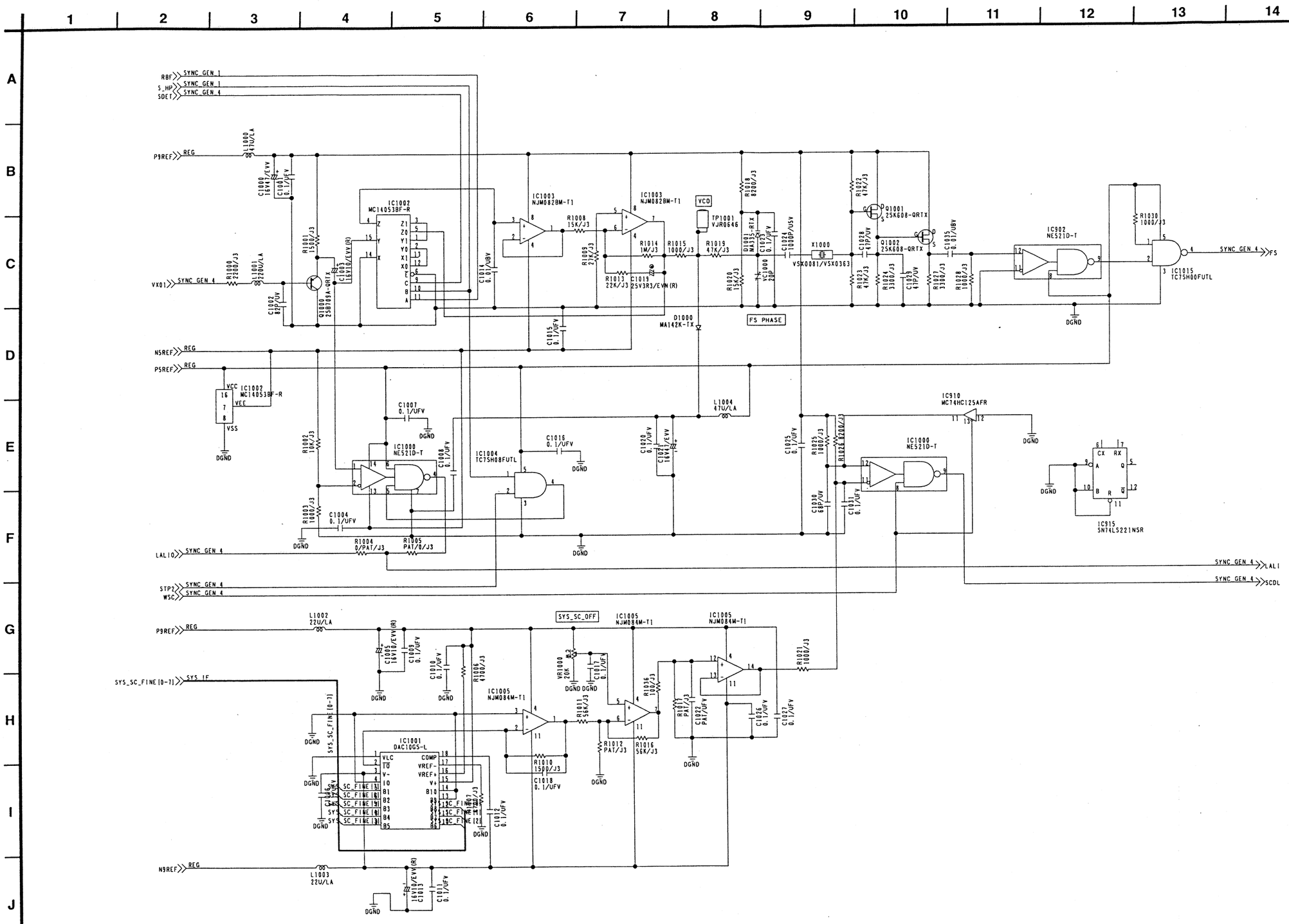
2–55

V OUT SYNC GEN 1 (F4 12/16) SCHEMATIC DIAGRAM



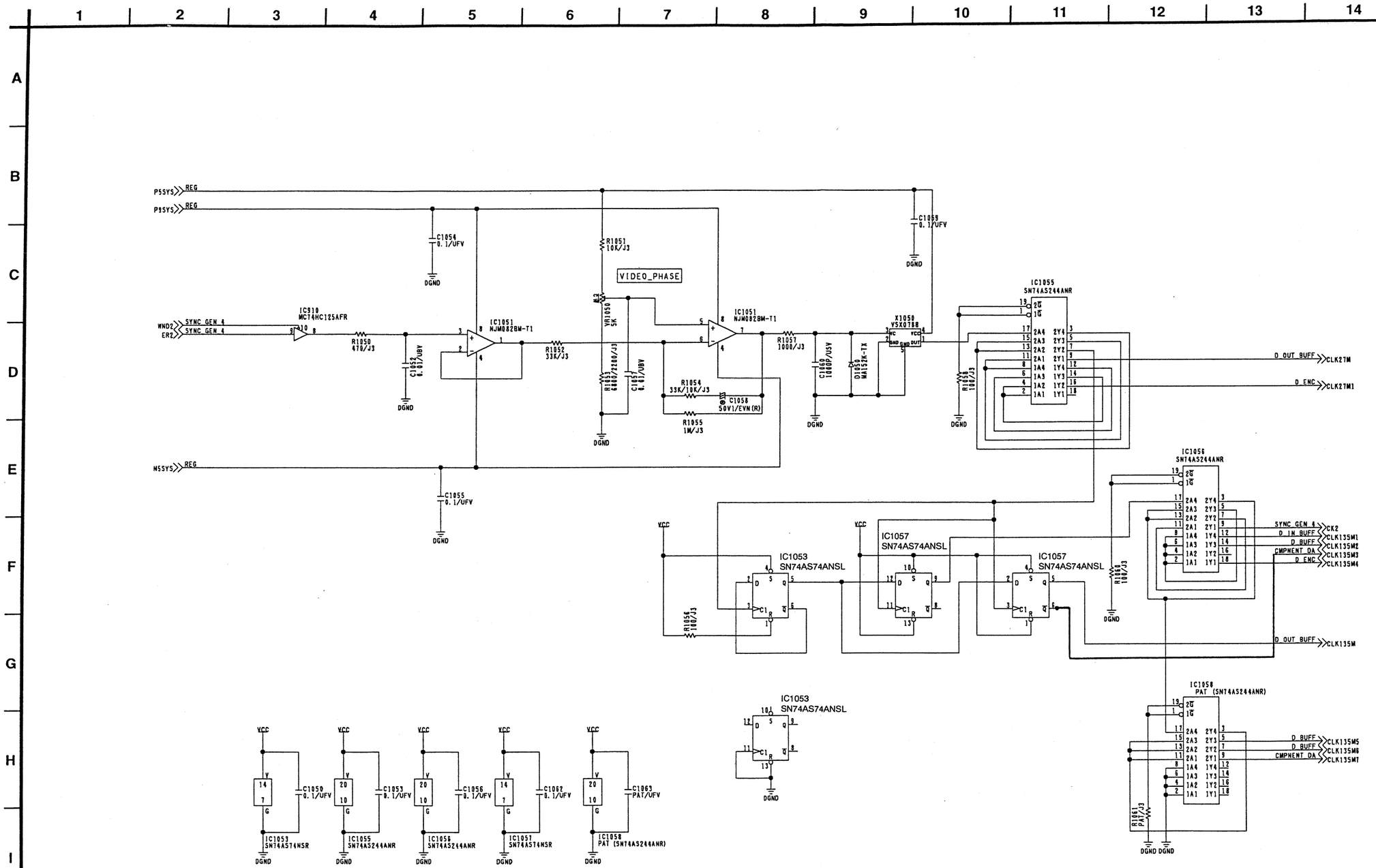
2–56

V OUT SYNC GEN 2 (F4 13/16) SCHEMATIC DIAGRAM



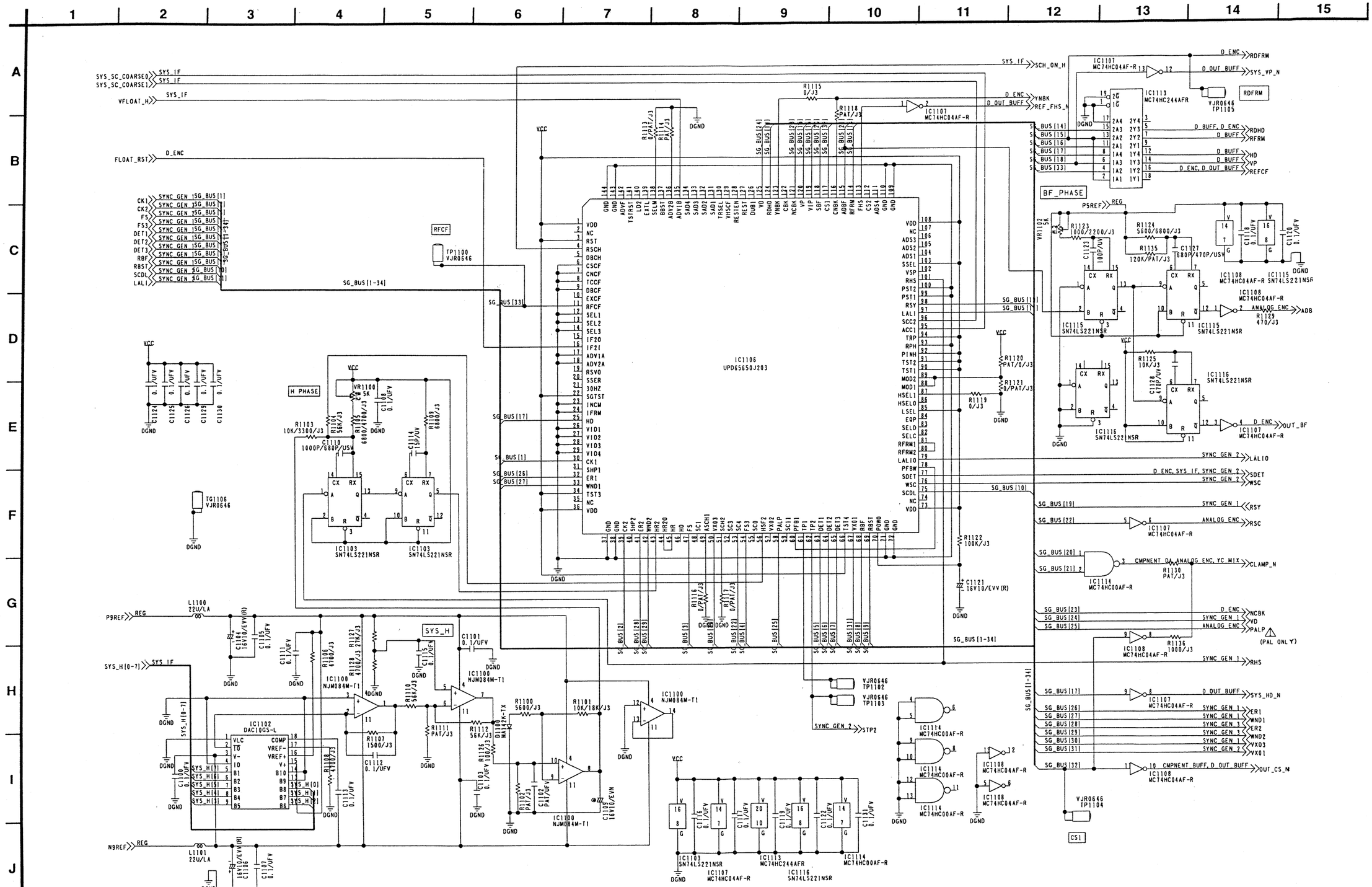
2-57

V OUT SYNC GEN 3 (F4 14/16) SCHEMATIC DIAGRAM



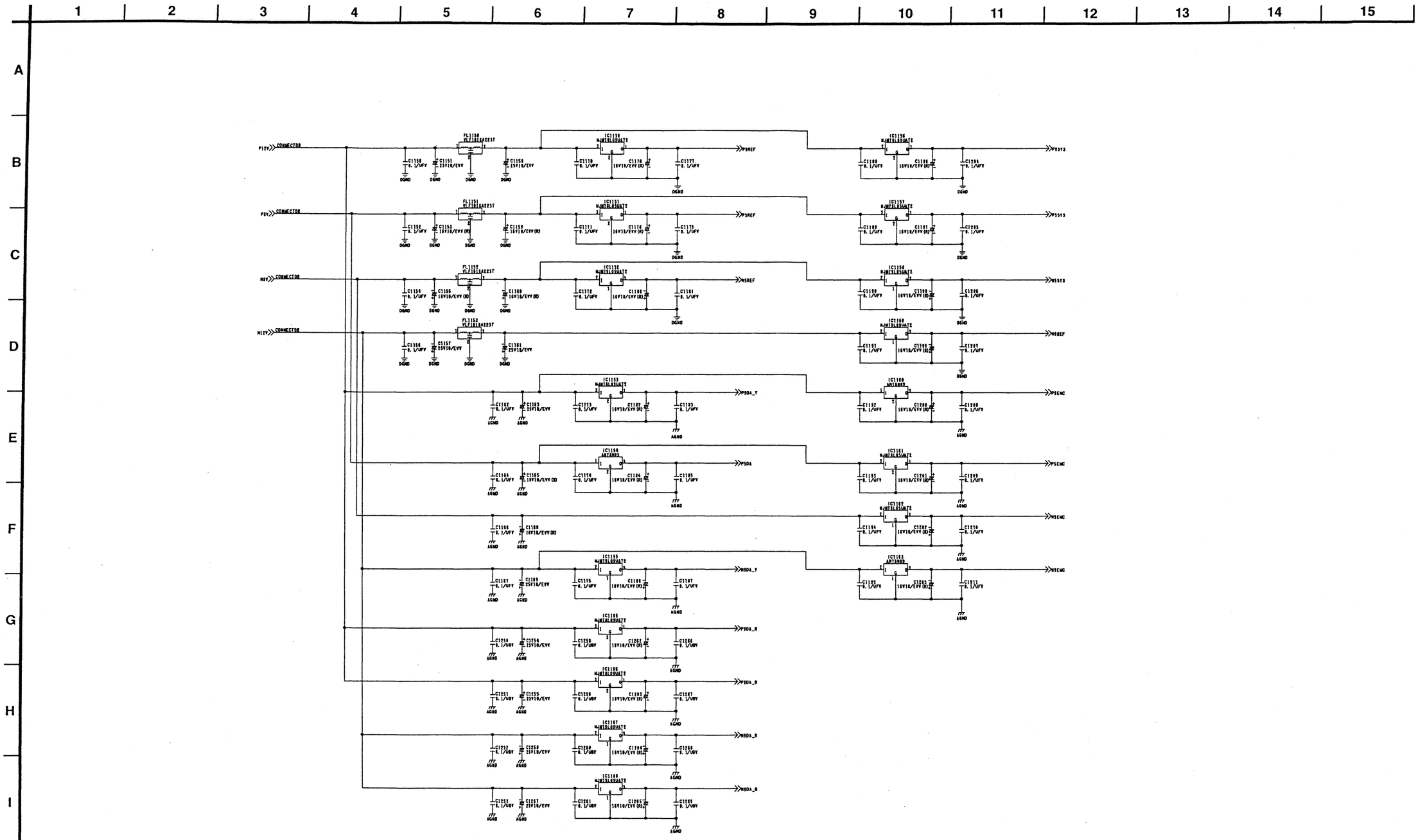
2–58

V OUT SYNC GEN 4 (F4 15/16) SCHEMATIC DIAGRAM



2–59

V OUT REG (F4 16/16) SCHEMATIC DIAGRAM



2–60

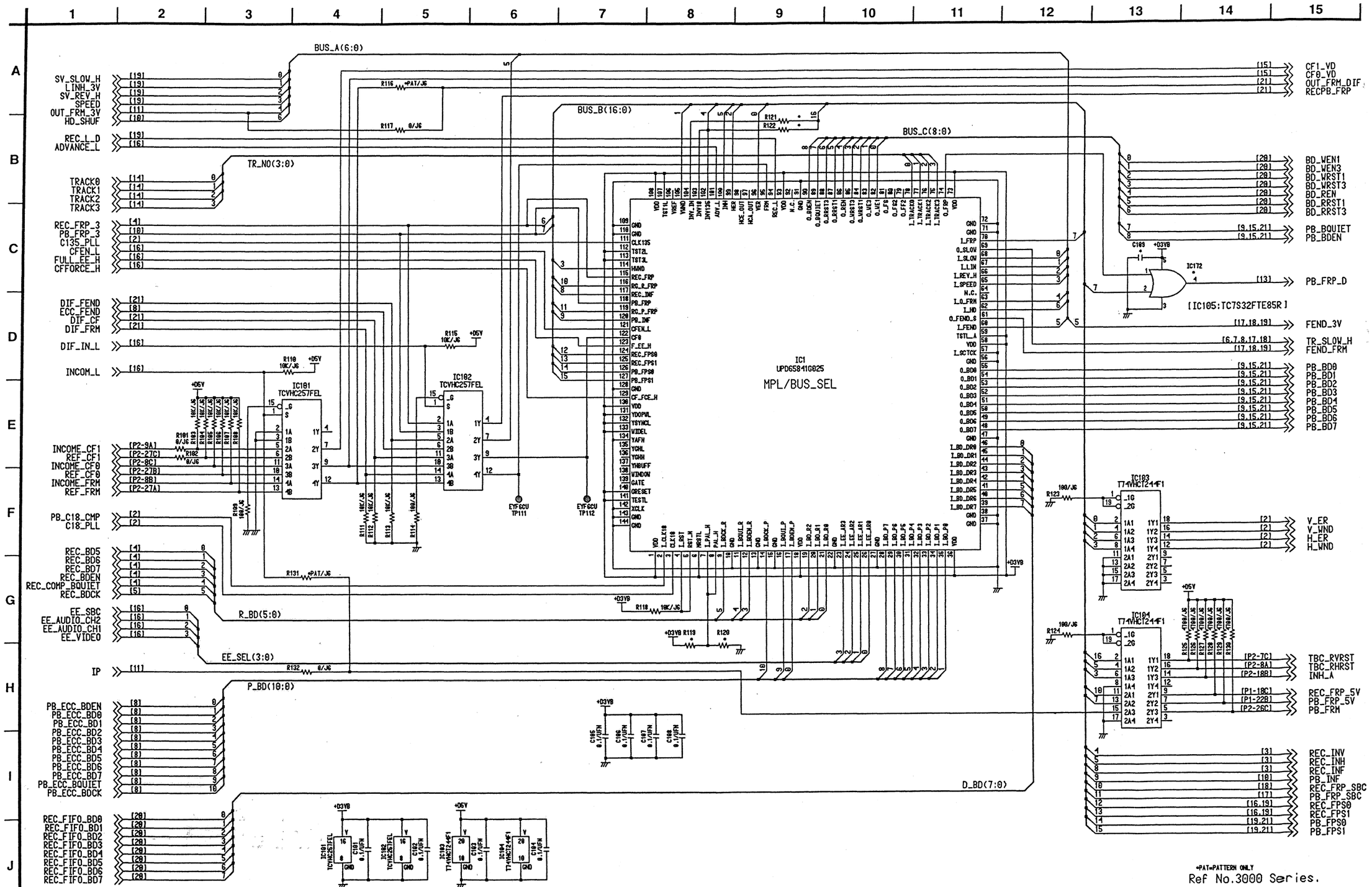
Ref. No.	AJ-D640P/AJ-D650P	AJ-D640/AJ-D650	AJ-D640E/AJ-D650E	Position
C327	ECUV1H120JCV	←		C-F-1
C331	ECUV1H120JCV	←		C-E-1
C338	ECUV1H100DCV	←		F-E-1
C342	ECUV1H100DCV	←		F-E-1
C405	ECUV1H180JCV	←	ECUV1H330JCV	F-G-1
C407	ECUV1H121JCV	←	ECUV1H271JCV	F-G-1
C408	ECUV1H120JCV	←		F-G-1
C540			ECUV1E104ZFV	C-J-2
C543			ECUV1E104ZFV	F-I-3
C544			ECUV1H120JCV	C-I-3
C545	ECUV1H330JCV	←	ECUV1H270JCV	F-J-2
C546	ECUV1H271JCV	←	ECUV1H221JCV	F-J-2
C547	ECUV1H220JCV	←		C-J-2
C548	ECUV1H680JCV	←	ECUV1H270JCV	C-J-2
C549	ECUV1H070DCV	←		C-J-2
C550	ECUV1H121JCV	←	ECUV1H101JCV	F-J-2
C563			ECUV1E104ZFV	F-I-2
C564			ECUV1E104ZFV	F-I-2
C565			ECUV1H100DCV	F-J-2
C566	ECUV1H100DCV	←	ECUV1H470JCV	F-J-3
C567			ECUV1H330JCV	F-J-3
C577	ECUV1E104ZFV			F-H-1
C578	ECUV1E104ZFV			F-H-1
C836	ECUV1E104ZFV			F-J-3
C837	ECUV1E104ZFV			F-J-3
C943	ECUV1H150JCV	←		F-C-1
C944	ECUV1H150JCV	←		F-C-1
C1110	ECUV1H102JV	←	ECUV1H681JV	F-B-1
C1127	ECUV1H681JV	←	ECUV1H471JCV	F-B-1
L400	VLQ0163J470	←	VLQ0163J101	F-G-1
L507	VLQ0163J270	←	VLQ0163J150	F-J-2
L508	VLQ0163J6R8	←	VLQ0163J5R6	F-J-2
L510	VLQ0163J5R6	←	VLQ0163J6R8	C-J-3
L800	VLQ0163J120	←	VLQ0163J150	C-I-3
L902	VLQ0163J680	←	VLQ0163J390	F-C-1
Q509			XN6501-TX	C-I-3
Q511			2SC2295-BCTX	F-I-2
Q512			2SC2295-BCTX	F-I-2
Q514			2SB709A-QRTX	C-I-2
R250			ERJ3GEYJ103V	F-B-4
R251	ERJ3GEYJ103V	←		F-B-4
R263			ERJ3GEYJ103V	F-B-3
R264	ERJ3GEYJ103V	←		F-B-3
R352	ERJ3GEYJ152V	←	ERJ3GEYJ102V	F-E-1
R356	ERJ3GEYJ152V	←	ERJ3GEYJ102V	F-E-1
R506			ERJ3GEYJ470V	F-H-1
R512	ERJ3GEYJ0R00V	←		F-H-1
R526	ERJ3GEYJ394V	←	ERJ3GEYJ124V	C-I-2
R542	ERJ3GEYJ181V	←	ERJ3GEYJ100V	F-I-2
R543	ERJ3GEYJ152V	←	ERJ3GEYJ102V	F-I-2
R551			ERJ3GEYJ102V	C-I-2
R552	ERJ3GEYJ102V	←		C-I-2
R553	ERJ3GEYJ0R00V	←		F-J-3
R554			ERJ3GEYJ391V	C-I-2
R555			ERJ3GEYJ103V	C-J-2
R556			ERJ3GEYJ181V	C-I-2

Ref. No.	AJ-D640P/AJ-D650P	AJ-D640/AJ-D650	AJ-D640E/AJ-D650E	Position
R557			ERJ3GEYJ181V	C-I-2
R558			ERJ3GEYJ561V	C-I-2
R562	ERJ3GEYJ102V	←		C-I-2
R563			ERJ3GEYJ102V	C-I-2
R564			ERJ3GEYJ561V	C-I-3
R566			ERJ3GEYJ103V	F-I-3
R567			ERJ3GEYJ562V	F-I-2
R568			ERJ3GEYJ562V	F-I-2
R569			ERJ3GEYJ223V	F-I-2
R570			ERJ3GEYJ223V	F-I-2
R575			ERJ3GEYJ152V	C-I-2
R576			ERJ3GEYJ470V	C-I-2
R578			ERJ3GEYJ223V	F-I-2
R583	ERJ3GEYJ152V			F-H-1
R585	ERJ3GEYJ152V			F-H-1
R801	ERJ3GEYJ182V	←	ERJ3GEYJ271V	F-I-3
R871	ERJ3GEYJ103V	←	ERJ3GEYJ123V	F-C-3
R874	ERJ3GEYJ332V			C-J-3
R876	ERJ3GEYJ563V			F-J-3
R877	ERJ3GEYJ104V			F-I-3
R914	ERJ3GEYJ223V	←	ERJ3GEYJ333V	F-C-1
R923	ERJ3GEYJ223V	←	ERJ3GEYJ332V	F-A-3
R1004	ERJ3GEYJ0R00V	←		F-C-3
R1005			ERJ3GEYJ0R00V	F-C-3
R1053	ERJ3GEYJ682V	←	ERJ3GEYJ222V	F-A-1
R1054	ERJ3GEYJ333V	←	ERJ3GEYJ103V	F-A-1
R1101	ERJ3GEYJ103V	←	ERJ3GEYJ183V	F-B-3
R1103	ERJ3GEYJ103V	←	ERJ3GEYJ332V	F-B-1
R1105	ERJ3GEYJ682V	←	ERJ3GEYJ472V	F-B-1
R1113	ERJ3GEYJ0R00V	←		C-B-2
R1116	ERJ3GEYJ0R00V	←		F-C-2
R1117	ERJ3GEYJ0R00V	←		F-C-2
R1120			ERJ3GEYJ0R00V	C-B-1
R1121	ERJ3GEYJ0R00V	←		C-B-1
R1123	ERJ3GEYJ102V	←	ERJ3GEYJ222V	F-B-1
R1124	ERJ3GEYJ562V	←	ERJ3GEYJ682V	C-B-1
R1135	ERJ3GEYJ124V	←		C-B-1
X900	VSX0338	←	VSX0270	C-A-2
X1000	VSX0081	←	VSX0363	C-D-2
QR500	MUN2213T1			F-H-2
QR501	MUN2213T1			F-H-2
QR801	MUN2213T1			F-J-3
QR802	MUN2213T1			F-I-2
QR803	MUN2212T1			F-J-2
SW400	VSS0372	←		C-G-1
VC500			ECV1ZW30X53T	C-I-3
VR504			EVMEGSA00B13	C-H-1
VR508	VRV0113B203T			C-H-1
VR509	VRV0113B203T			C-H-1
VR804	VRV0113B203T			C-J-3
VR805	VRV0113B204T			C-I-3
VR900	EVMEGSA00B54	←	EVMEGSA00B24	C-C-1
IC700	VSI2499B	←	VSI2500B	C-A-4

Position.....C: Component Side
F: Foil Side

2–61

REC PB MPL/BUS SEL (F5 1/23) SCHEMATIC DIAGRAM

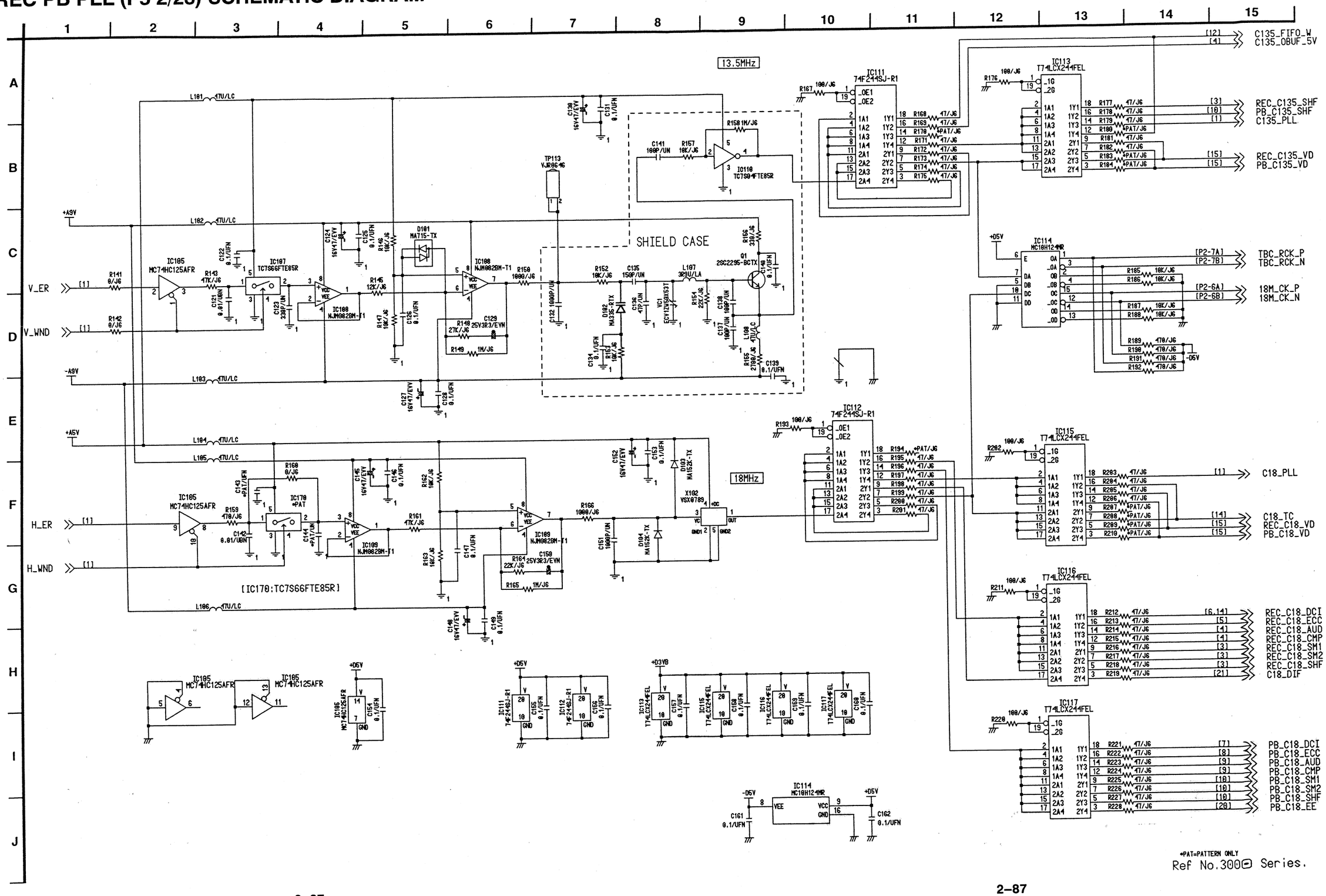


*PAT=PATTERN ONLY

Ref No.3000 Series.

2–86

REC PB PLL (F5 2/23) SCHEMATIC DIAGRAM

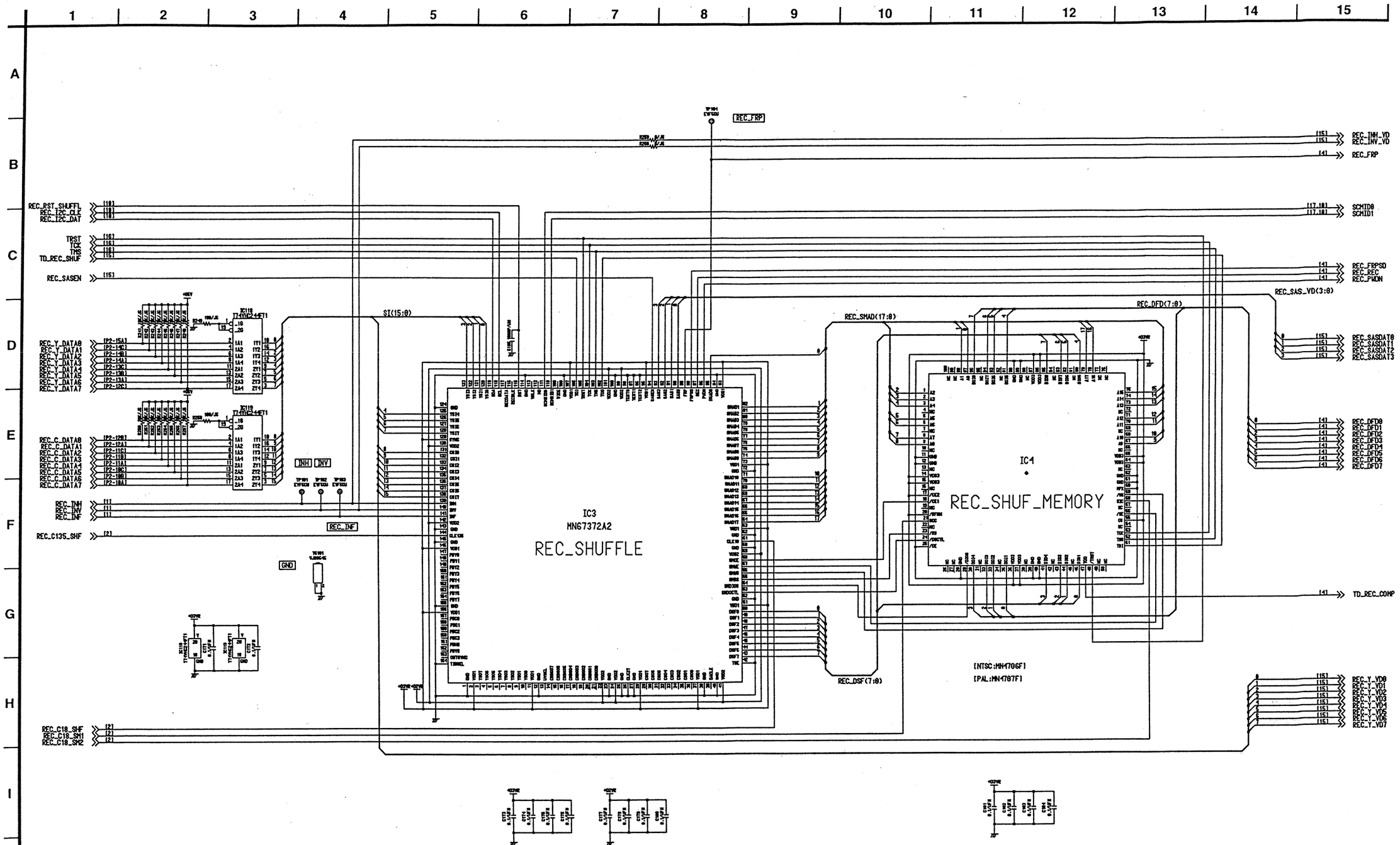


*PAT=PATTERN ONLY

Ref No.300⊡ Series.

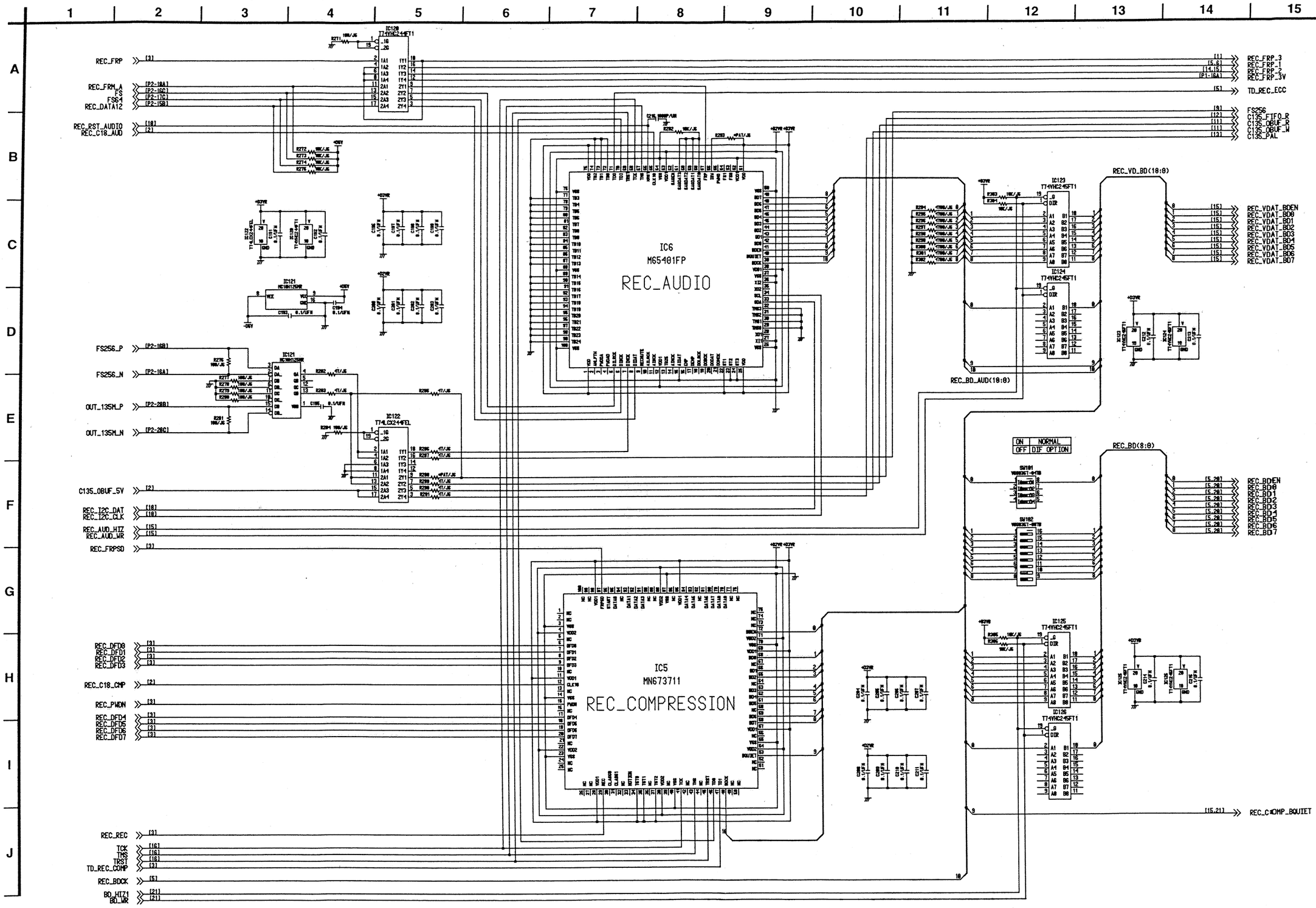
2-87

REC PB REC SHUF (F5 3/23) SCHEMATIC DIAGRAM



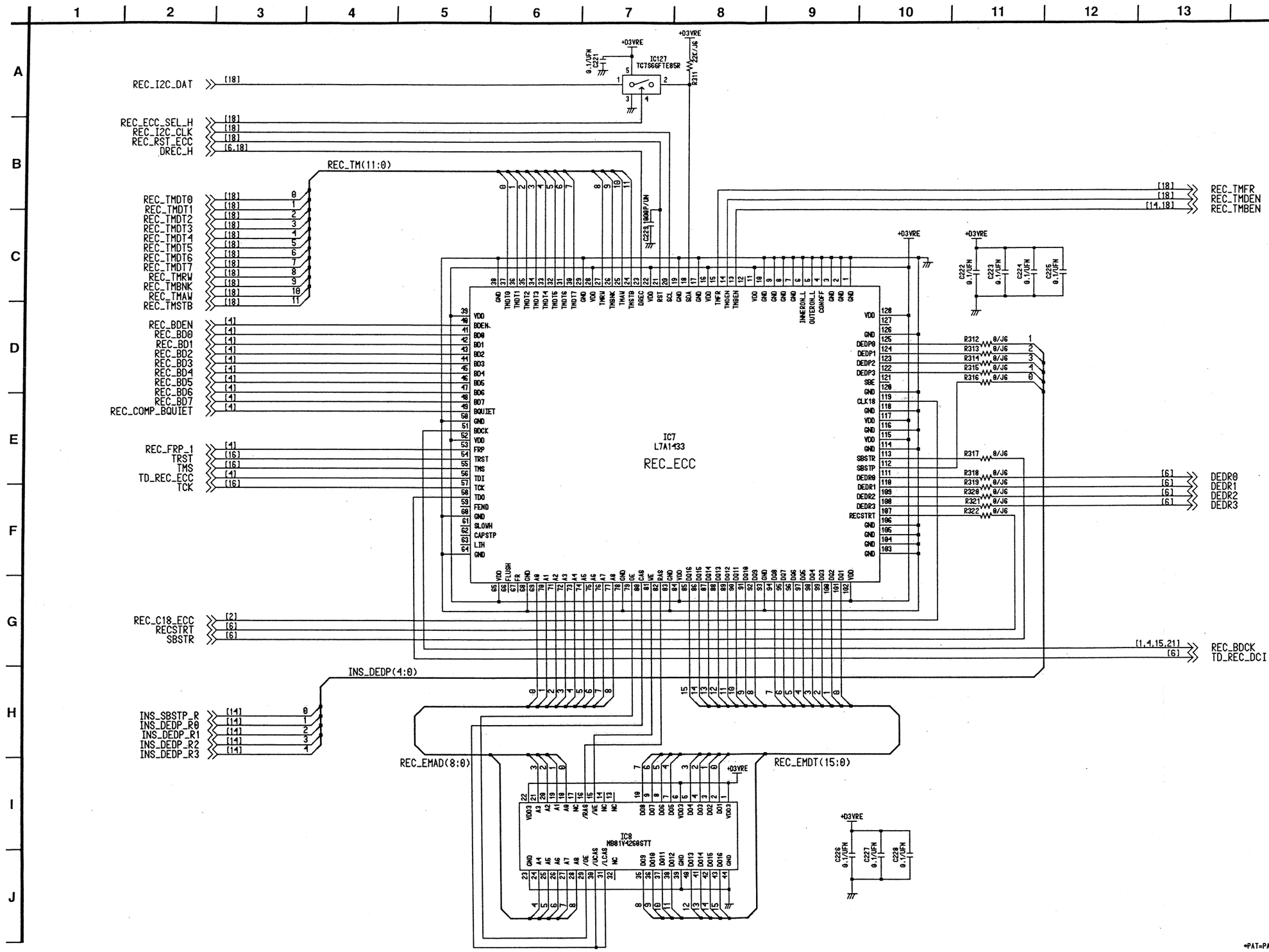
2–88

REC PB REC COMP, AUD (F5 4/23) SCHEMATIC DIAGRAM



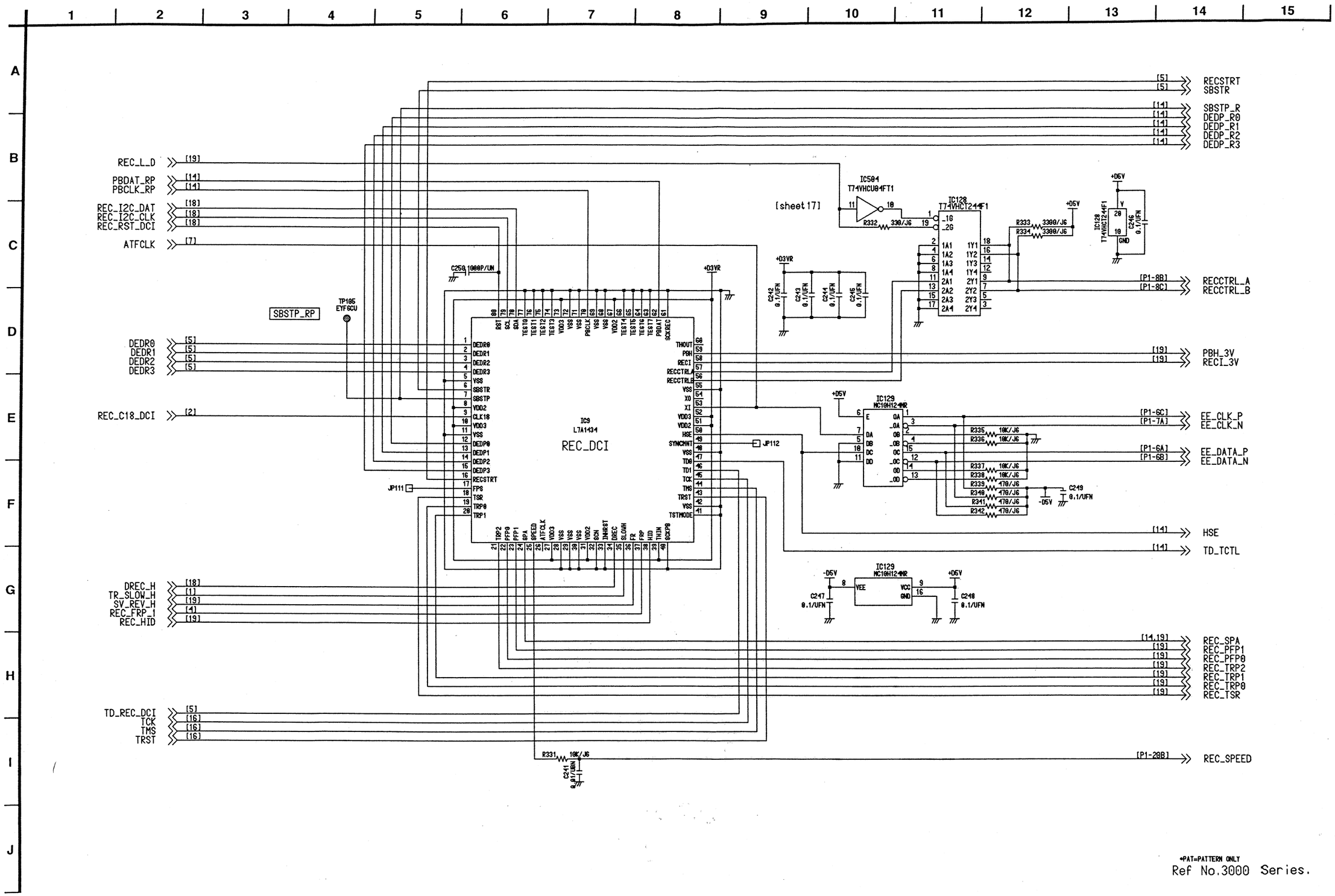
2-89

REC PB REC ECC (F5 5/23) SCHEMATIC DIAGRAM



*PAT=PATTERN ONLY
Ref No.3000 Series.

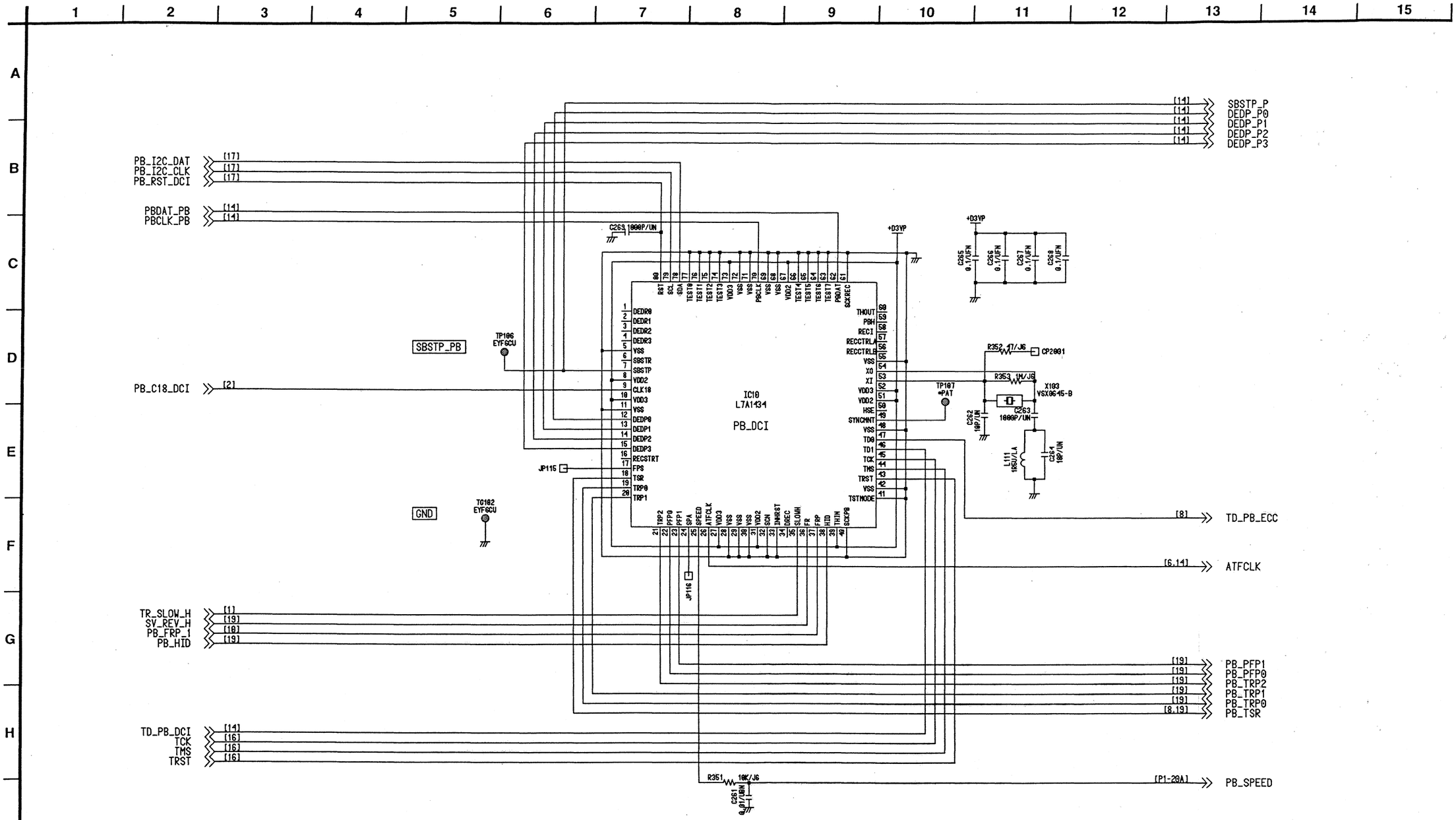
REC PB REC DCI (F5 6/23) SCHEMATIC DIAGRAM



*PAT=PATTERN ONLY
Ref No.3000 Series.

2-91

REC PB PB DCI (F5 7/23) SCHEMATIC DIAGRAM

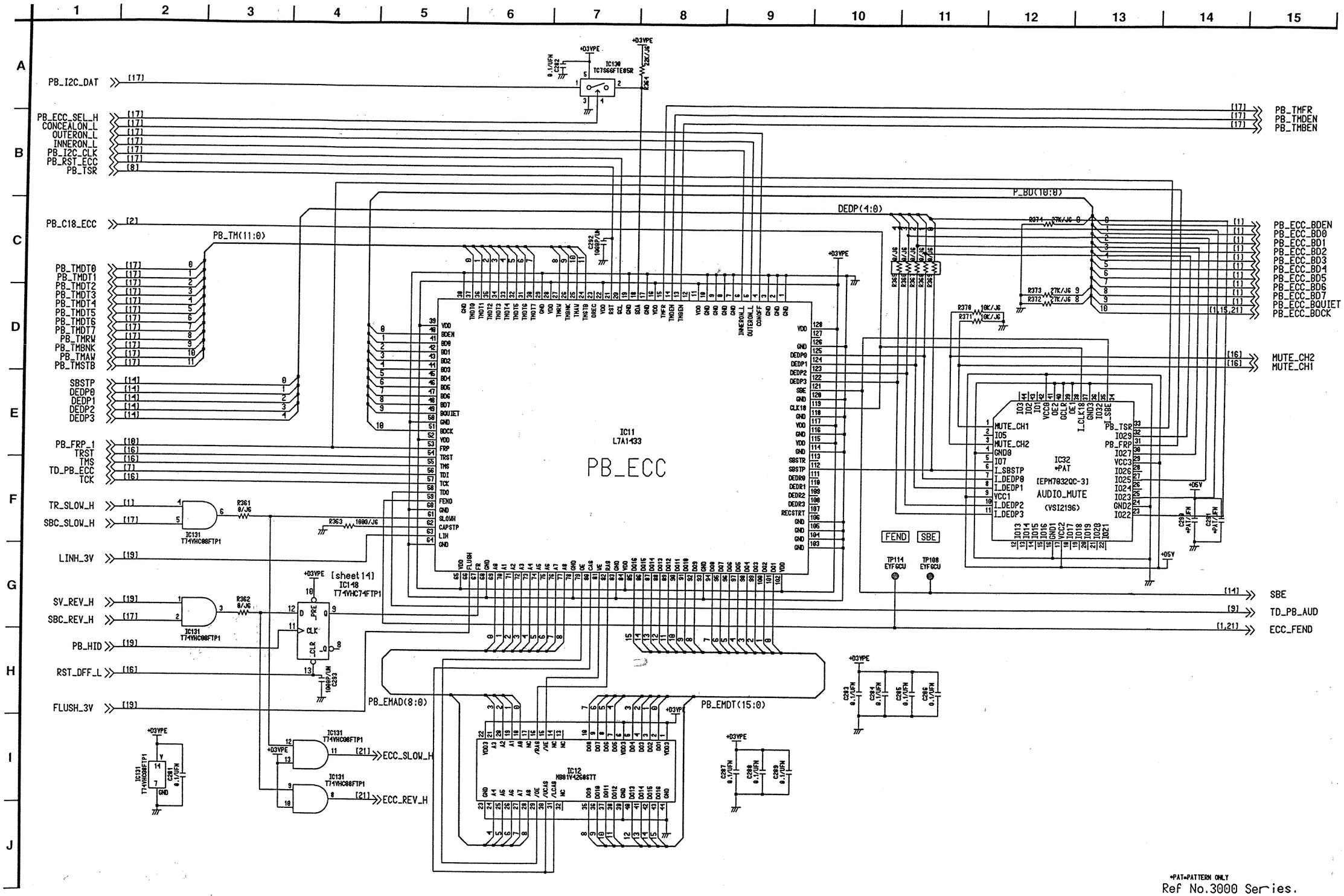


*PAT=PATTERN ONLY

Ref No.3000 Series.

2-92

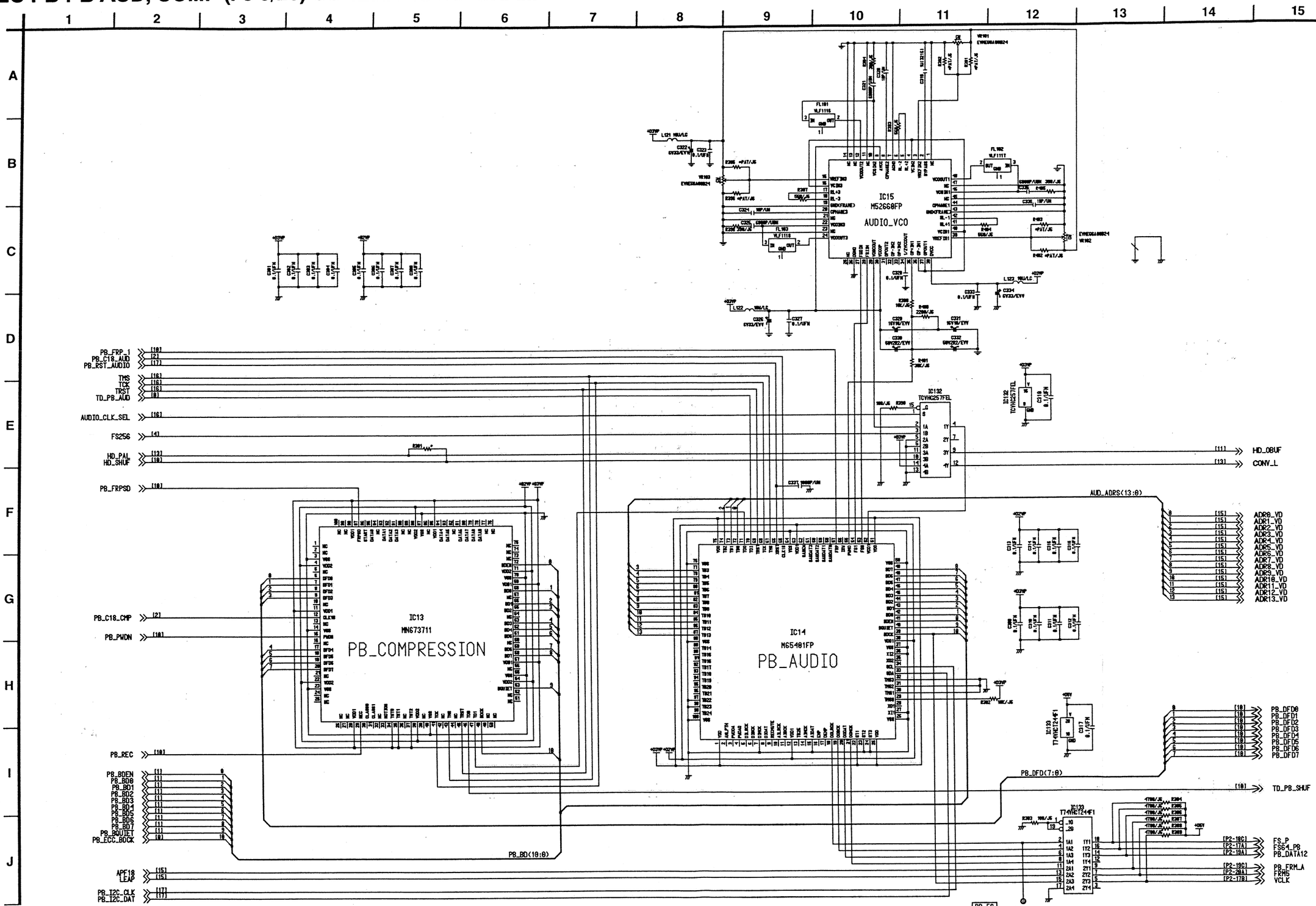
REC PB PB ECC (F5 8/23) SCHEMATIC DIAGRAM



*PAT=PATTERN ONLY
Ref No.3000 Series.

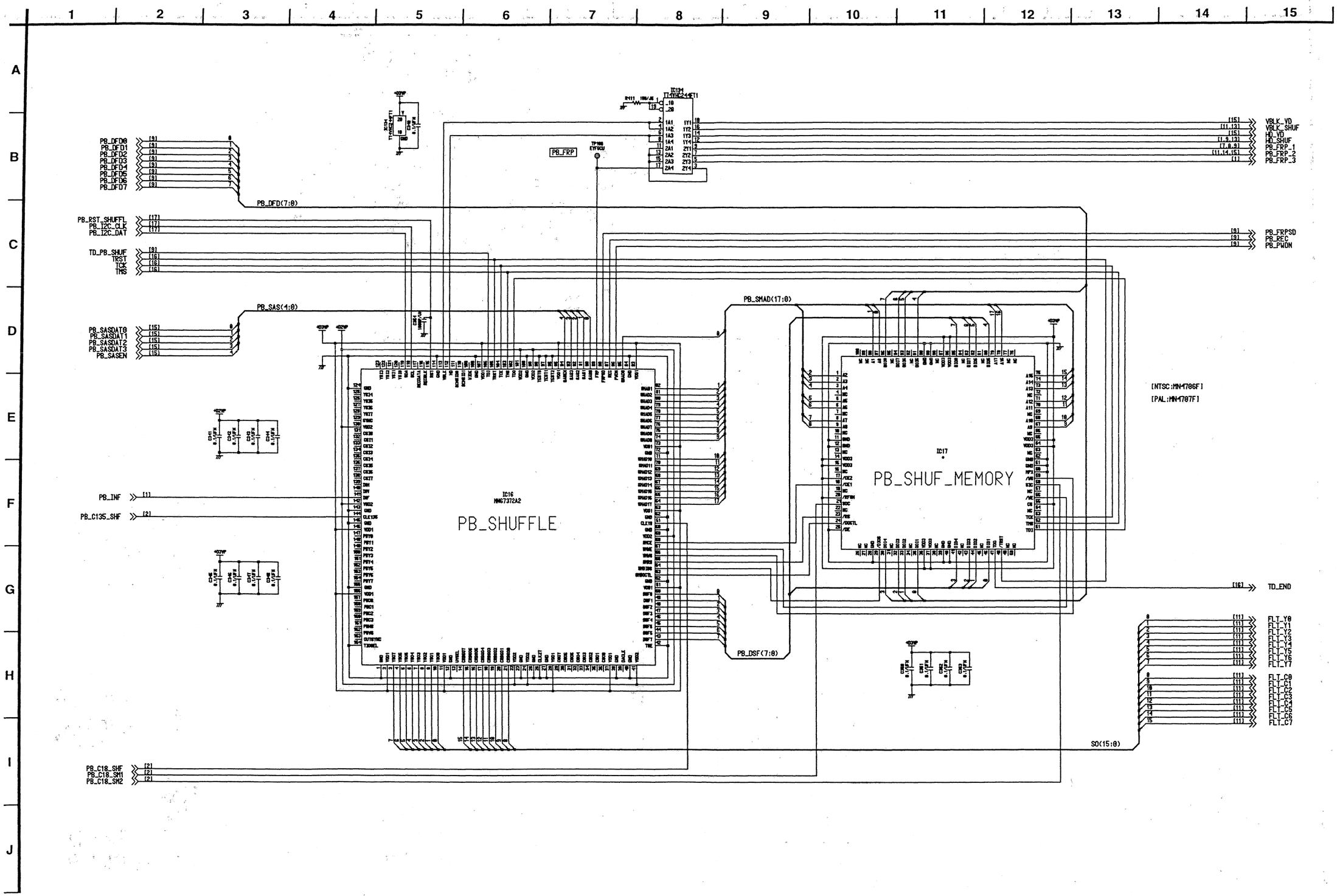
2-93

REC PB PB AUD, COMP (F5 9/23) SCHEMATIC DIAGRAM



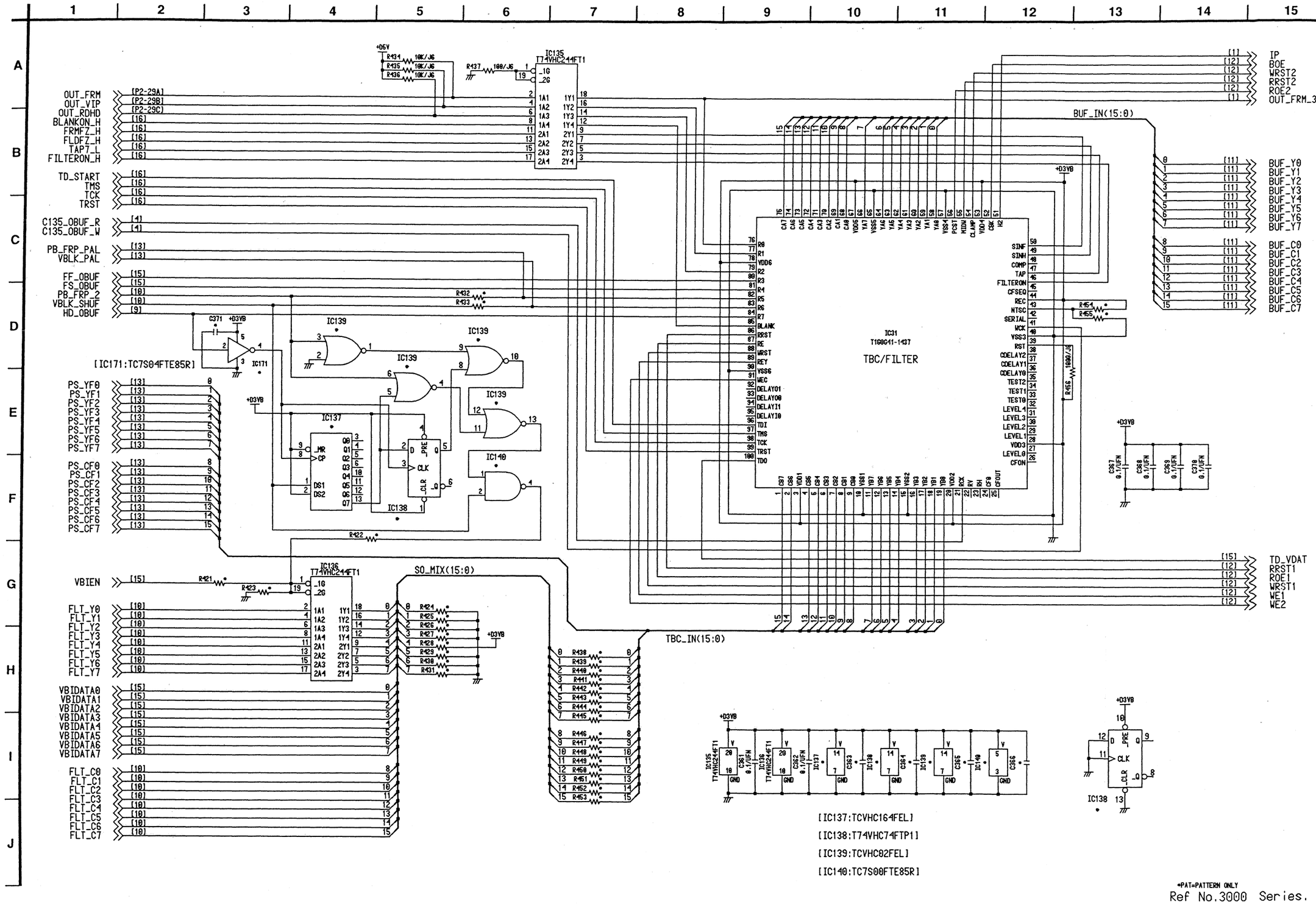
2-94

REC PB PB SHUF (F5 10/23) SCHEMATIC DIAGRAM



2-95

REC PB TBC/FILTER (F5 11/23) SCHEMATIC DIAGRAM

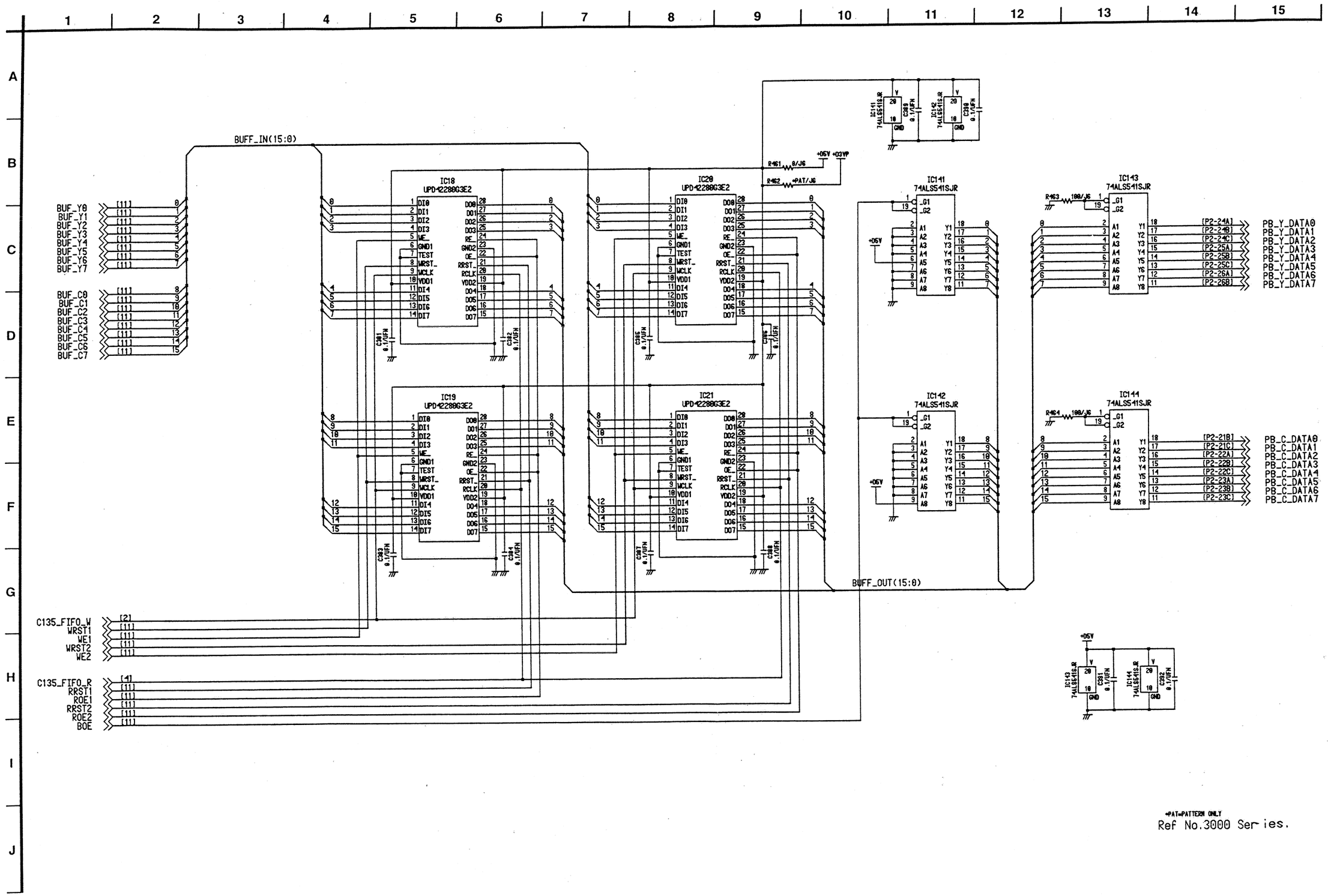


*PAT=PATTERN ONLY

Ref No.3000 Series.

2-96

REC PB OUT BUFF2 (F5 12/23) SCHEMATIC DIAGRAM

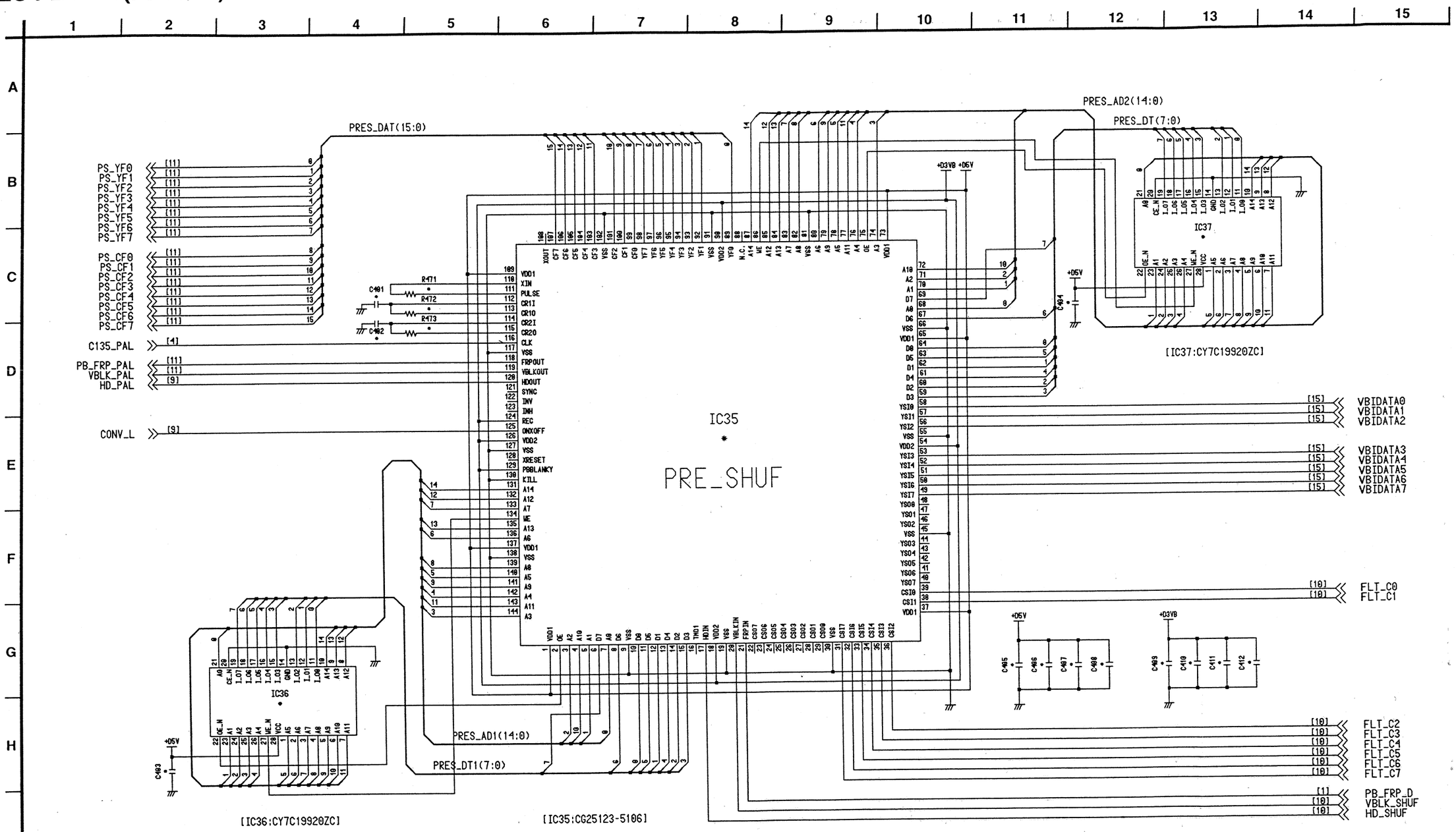


*PAT=PATTERN ONLY

Ref No.3000 Series.

2-97

REC PB PAL (F5 13/23) SCHEMATIC DIAGRAM

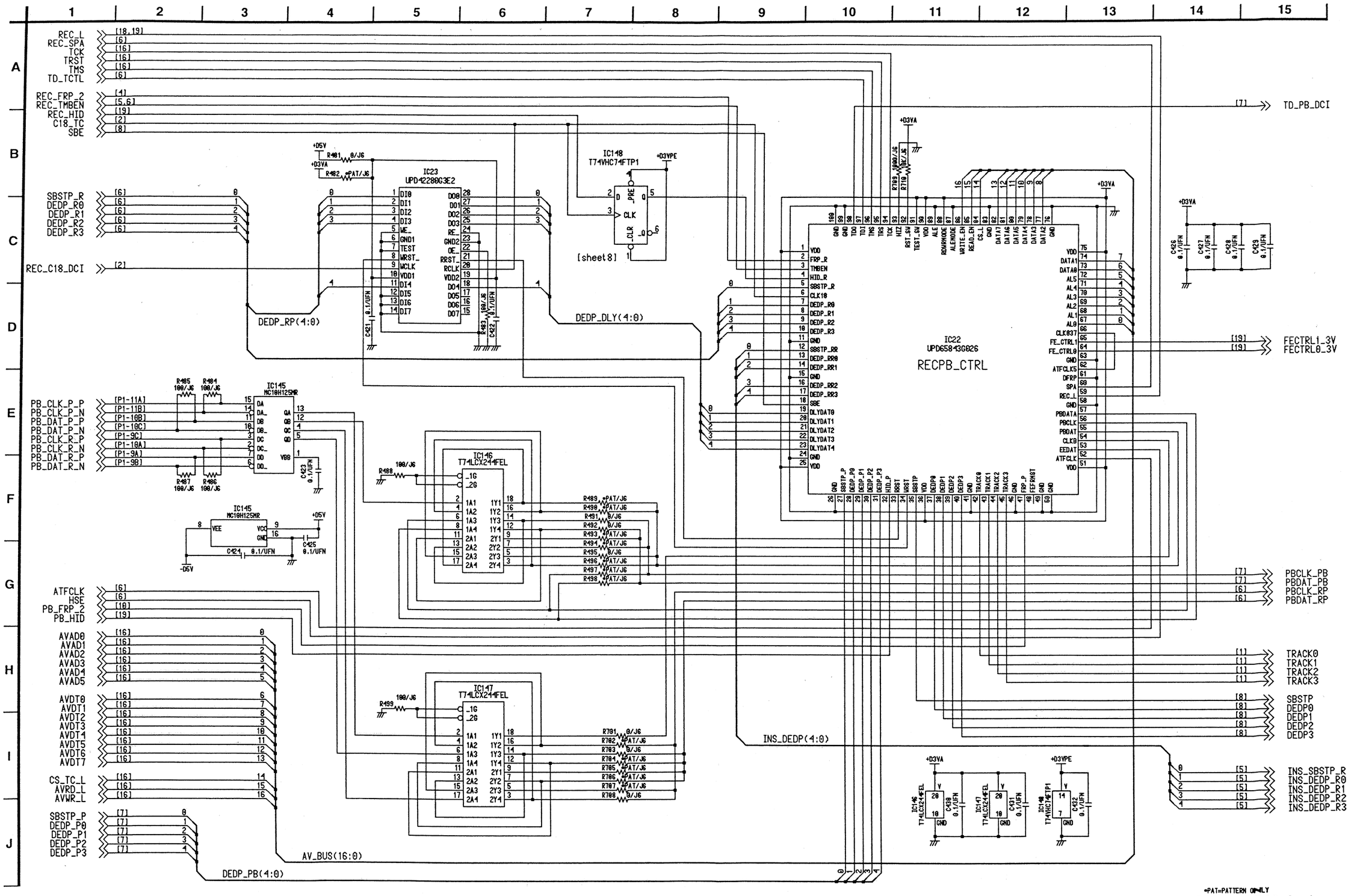


*PAT=PATTERN ONLY

Ref No.3□□□ Series.

2-98

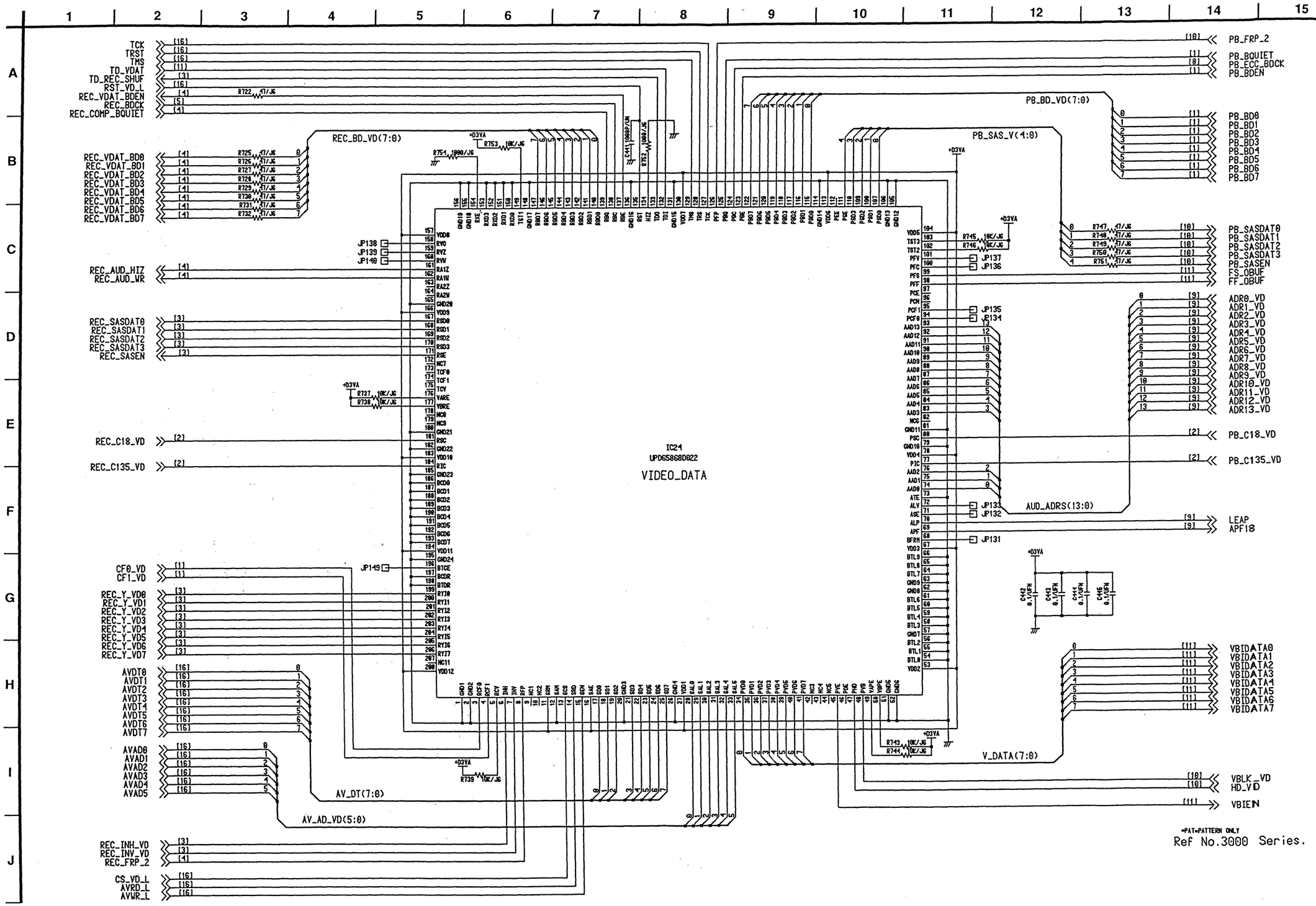
REC PB REC PB CTRL (F5 14/23) SCHEMATIC DIAGRAM



Ref No.3□00 Series.

2-99

REC PB VIDEO DATA (F5 15/23) SCHEMATIC DIAGRAM

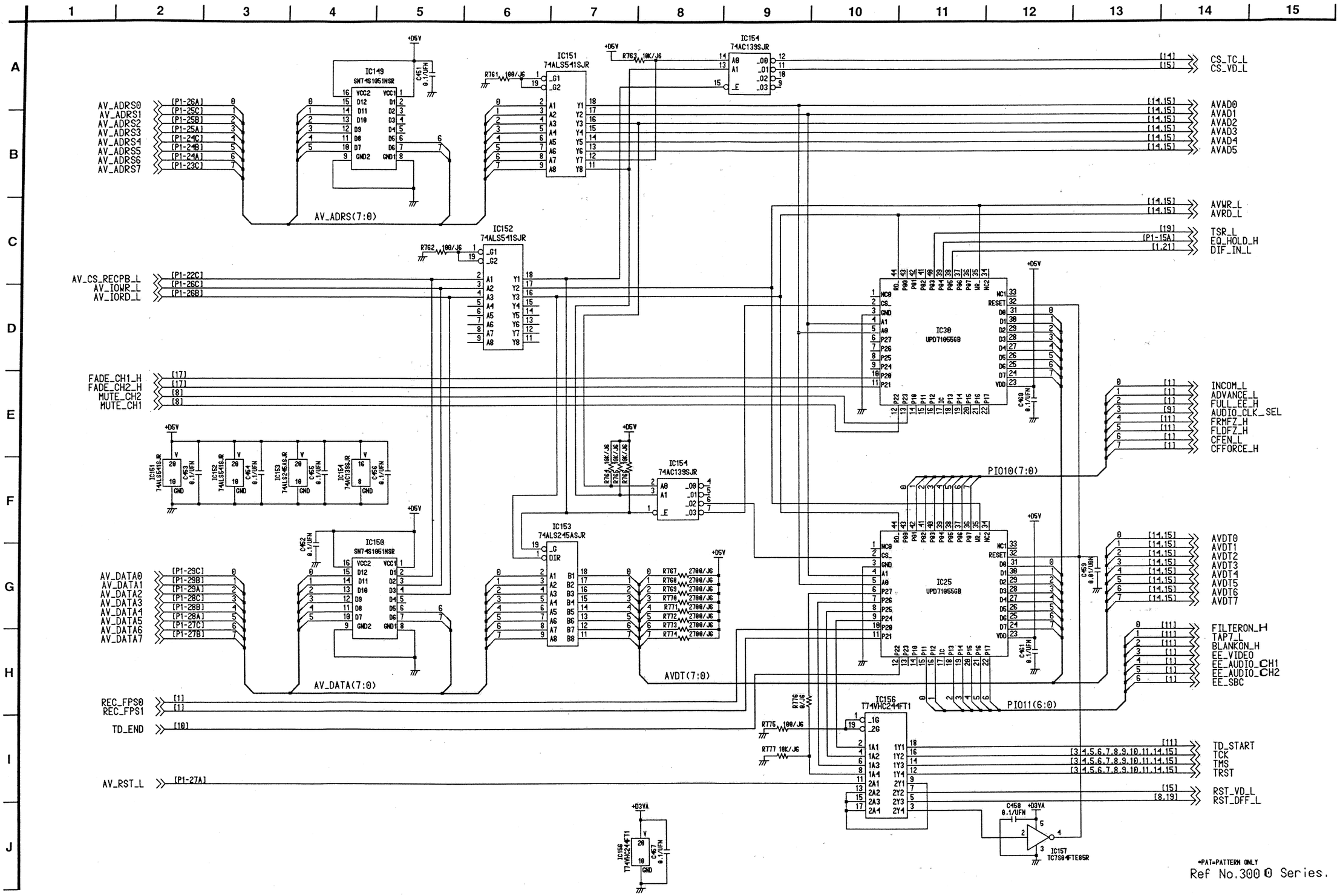


*PAT=PATTERN ONLY

Ref No.3000 Series.

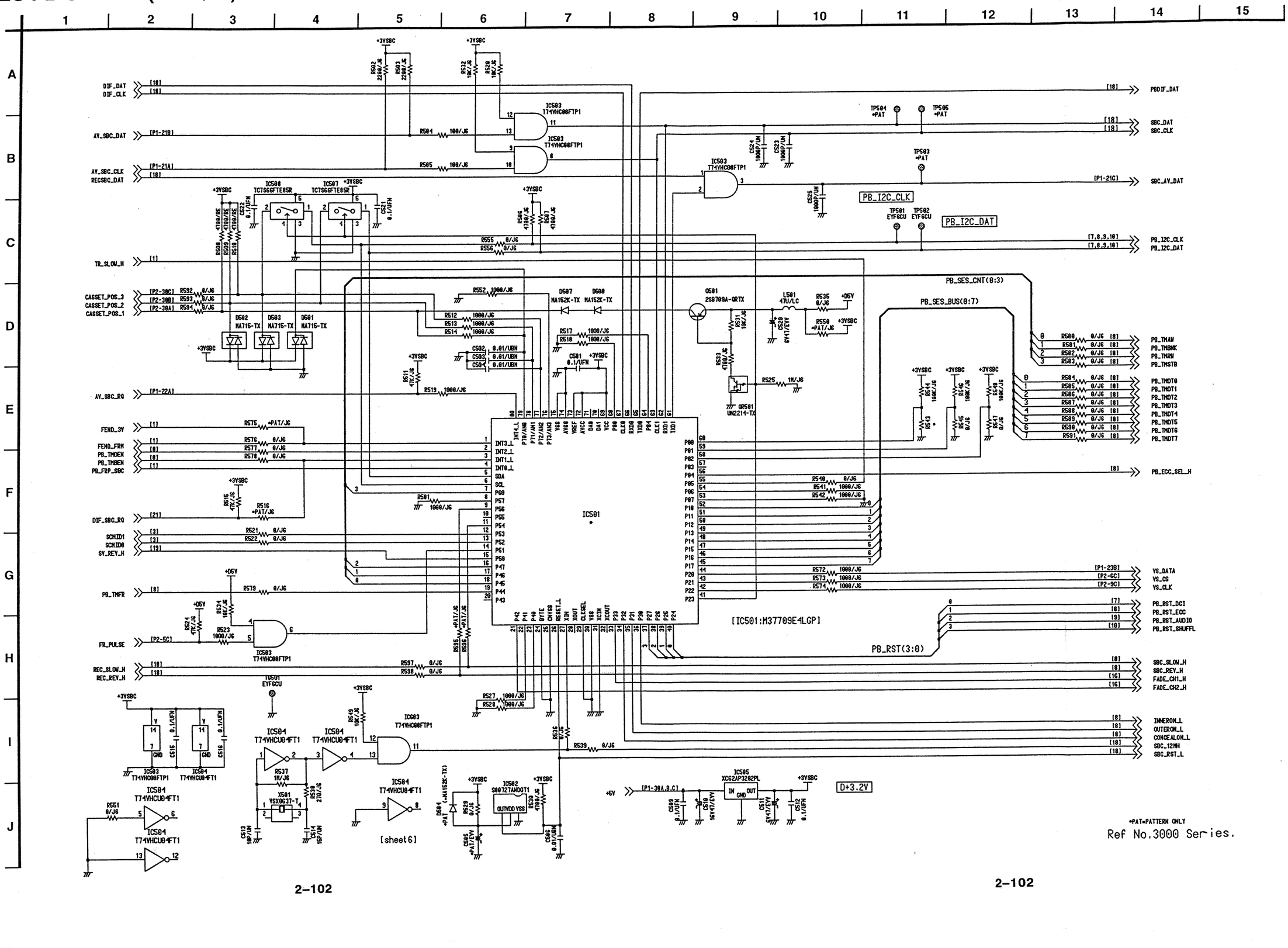
2-100

REC PB PIO (F5 16/23) SCHEMATIC DIAGRAM



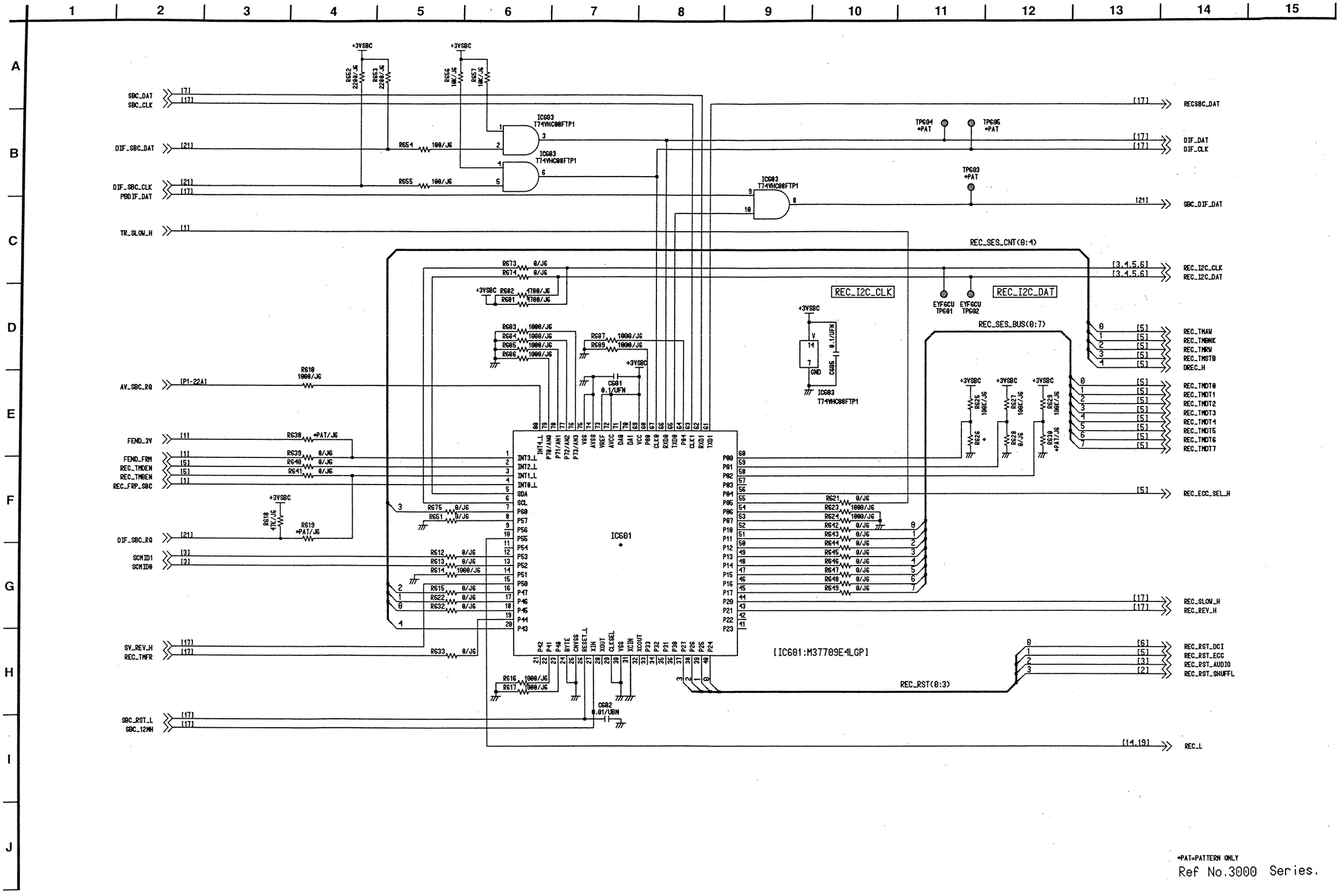
2-101

REC PB SBC PB (F5 17/23) SCHEMATIC DIAGRAM



2-102

REC PB SBC REC (F5 18/23) SCHEMATIC DIAGRAM

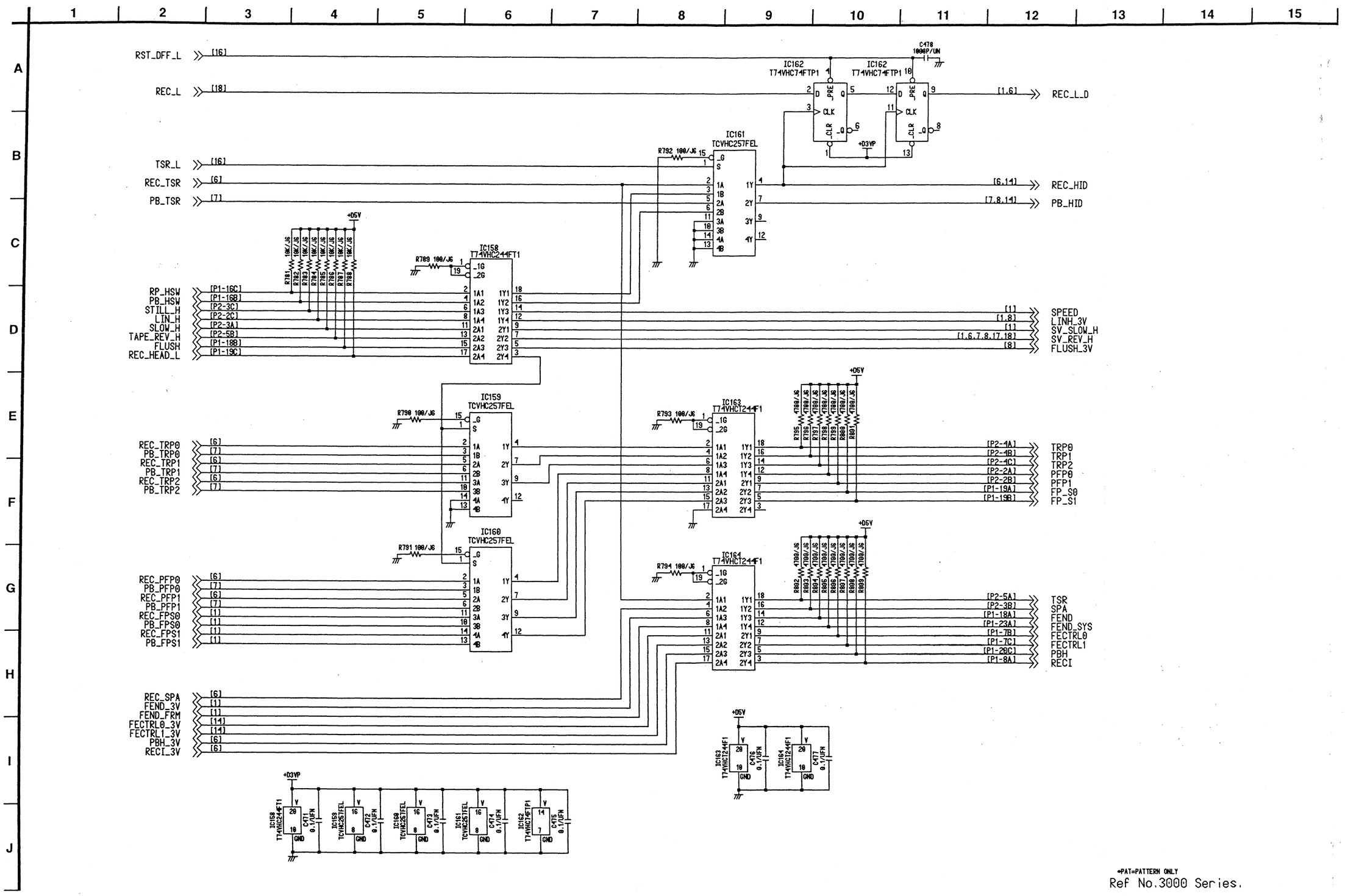


*PAT=PATTERN ONLY

Ref No.3000 Series.

2–103

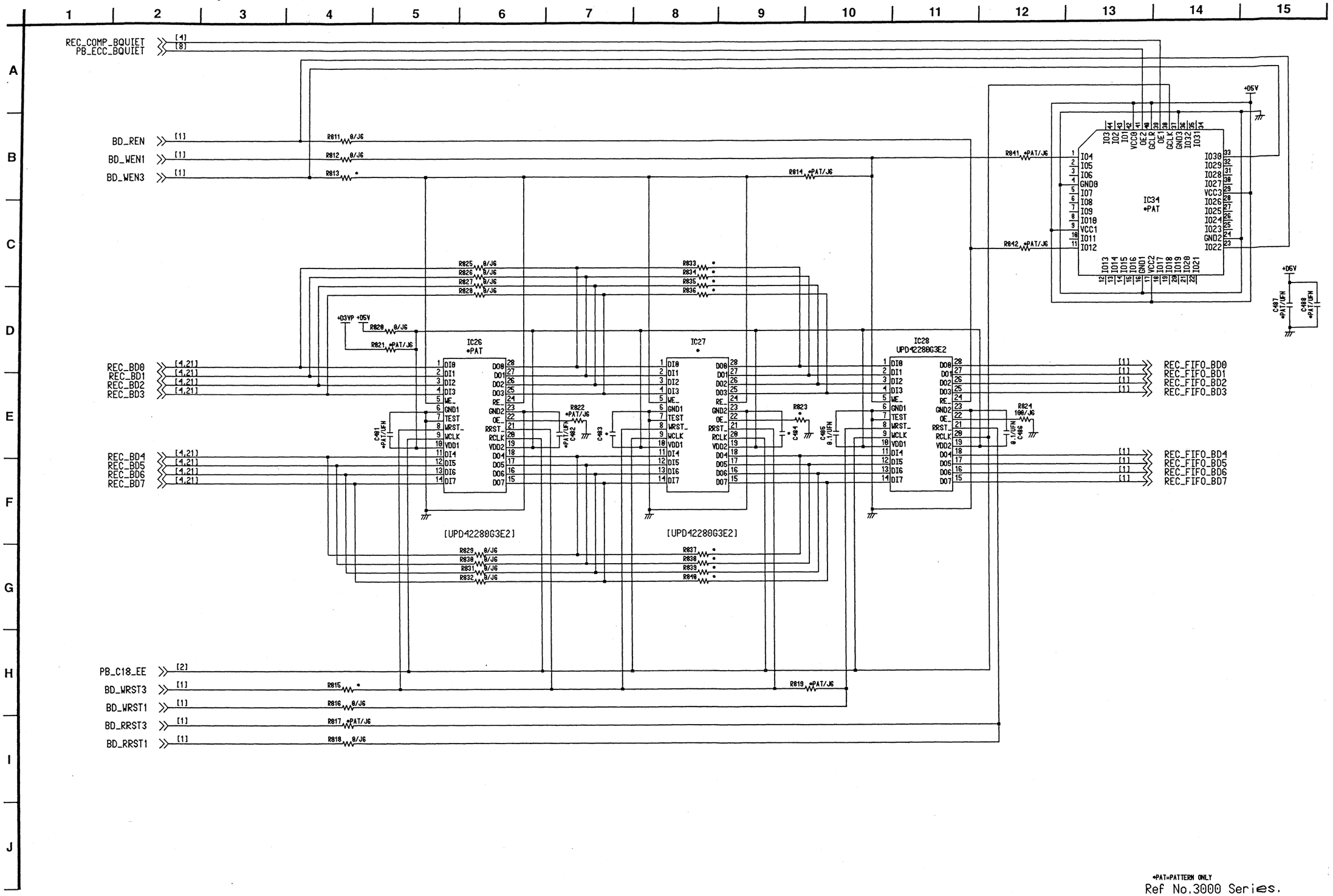
REC PB SERVO SEPA (F5 19/23) SCHEMATIC DIAGRAM



*PAT=PATTERN ONLY
Ref No.3000 Series.

2–104

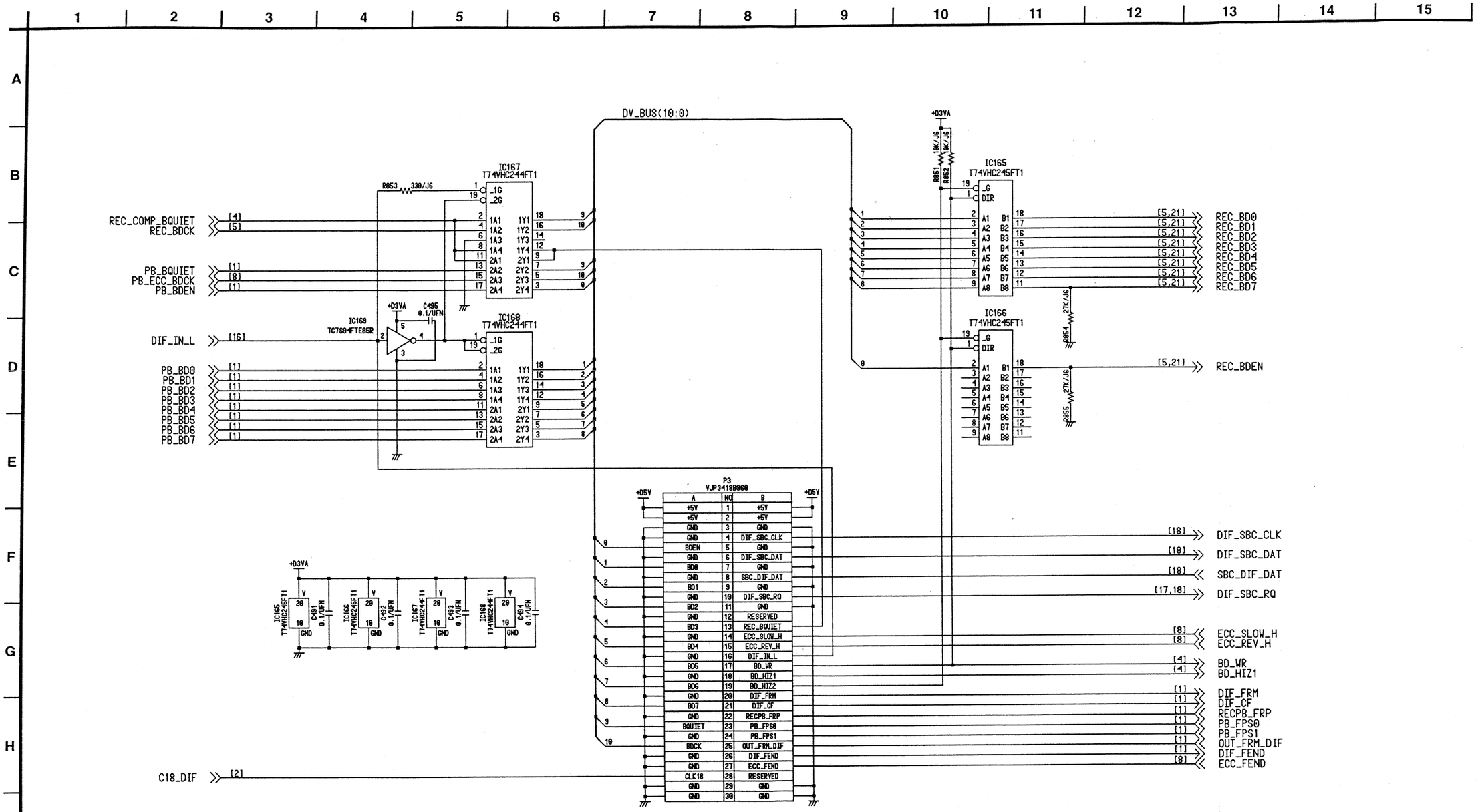
REC PB DVC RETURN (F5 20/23) SCHEMATIC DIAGRAM



*PAT=PATTERN ONLY
Ref No.3000 Series.

2-105

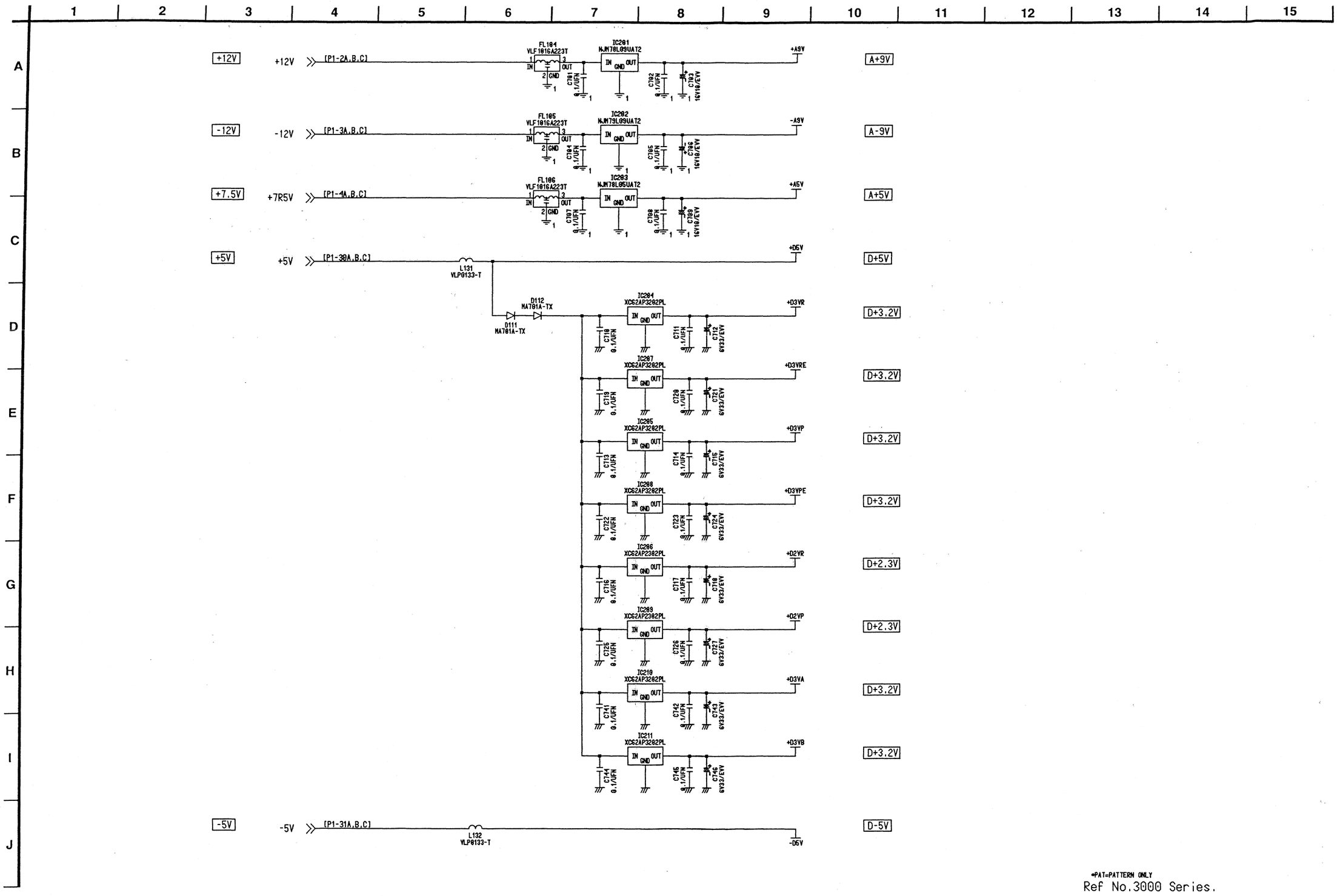
REC PB DIF (F5 21/23) SCHEMATIC DIAGRAM



*PAT=PATTERN ONLY
Ref No.3000 Series.

2-106

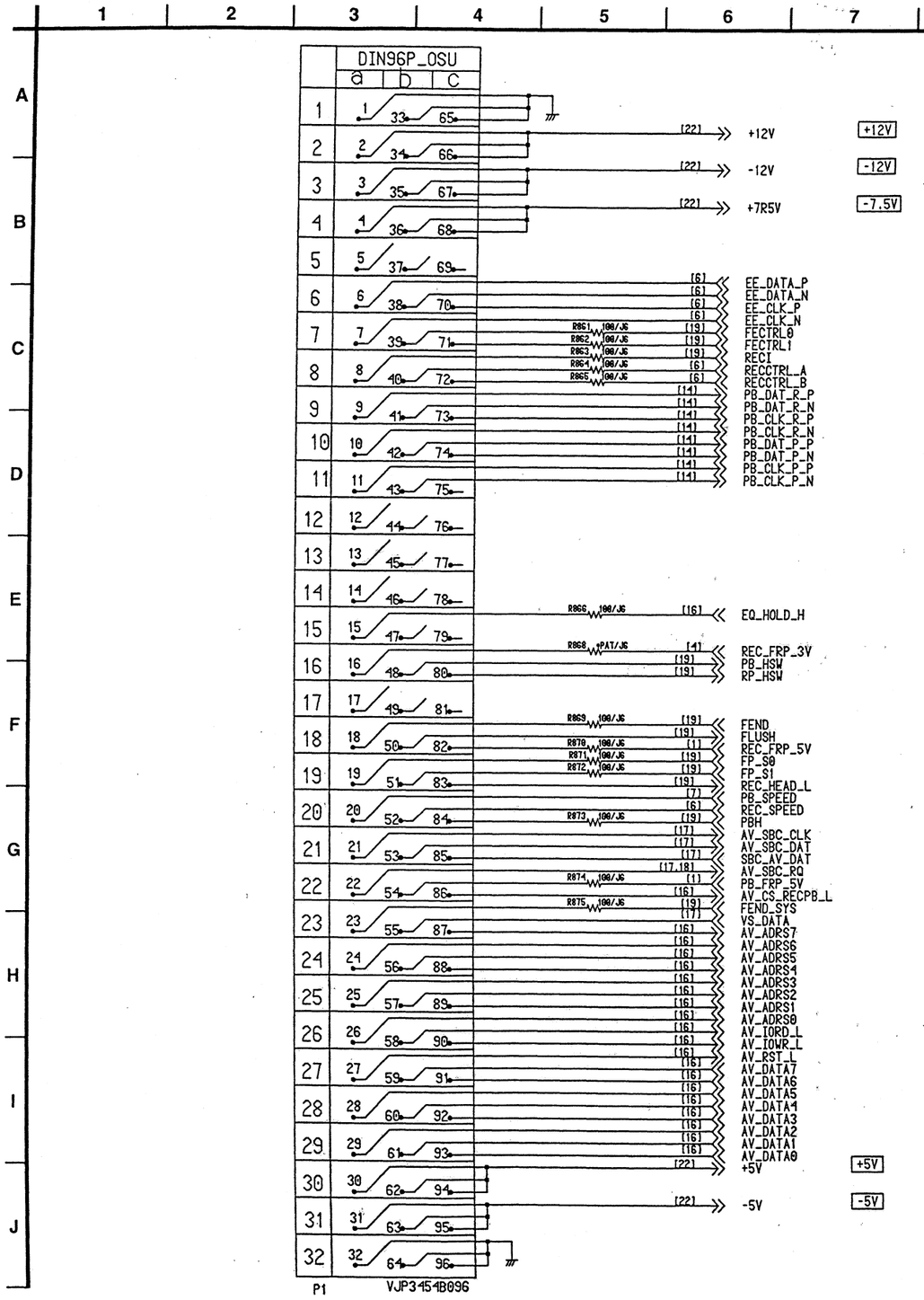
REC PB POWER (F5 22/23) SCHEMATIC DIAGRAM

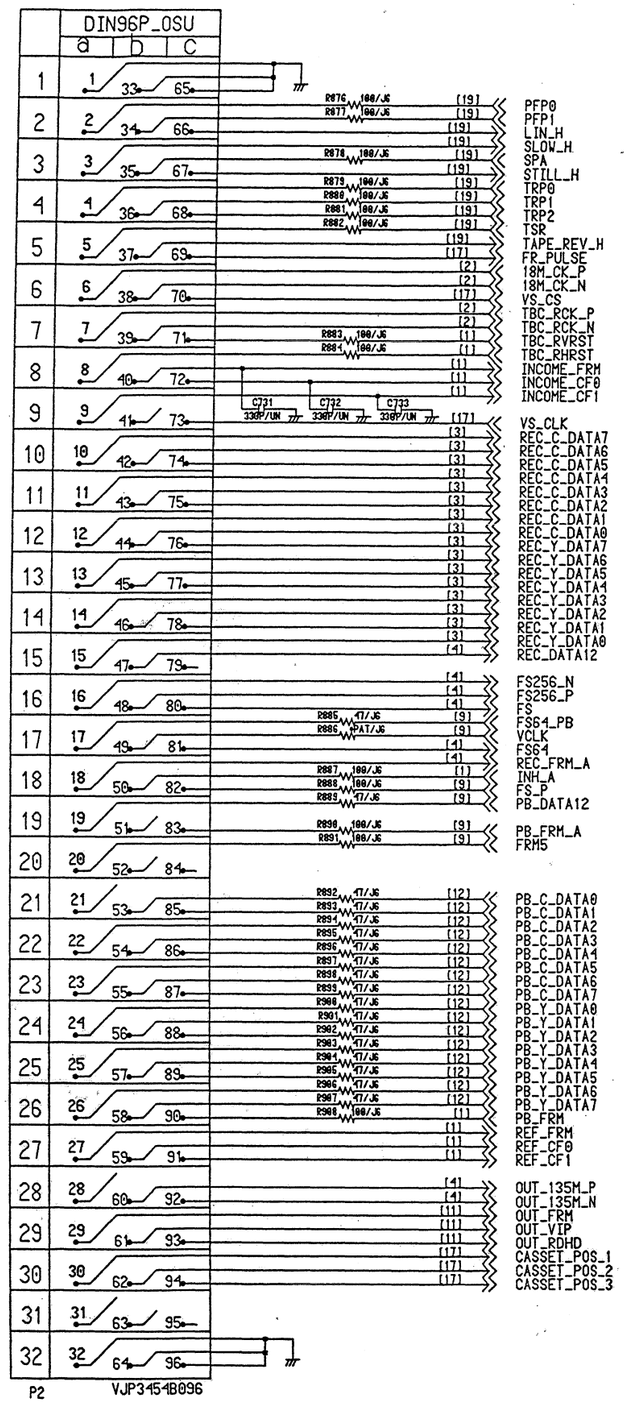


*PAT=PATTERN ONLY
Ref No.3000 Series.

2-107

REC PB MOTHER (F5 23/23) SCHEMATIC DIAGRAM



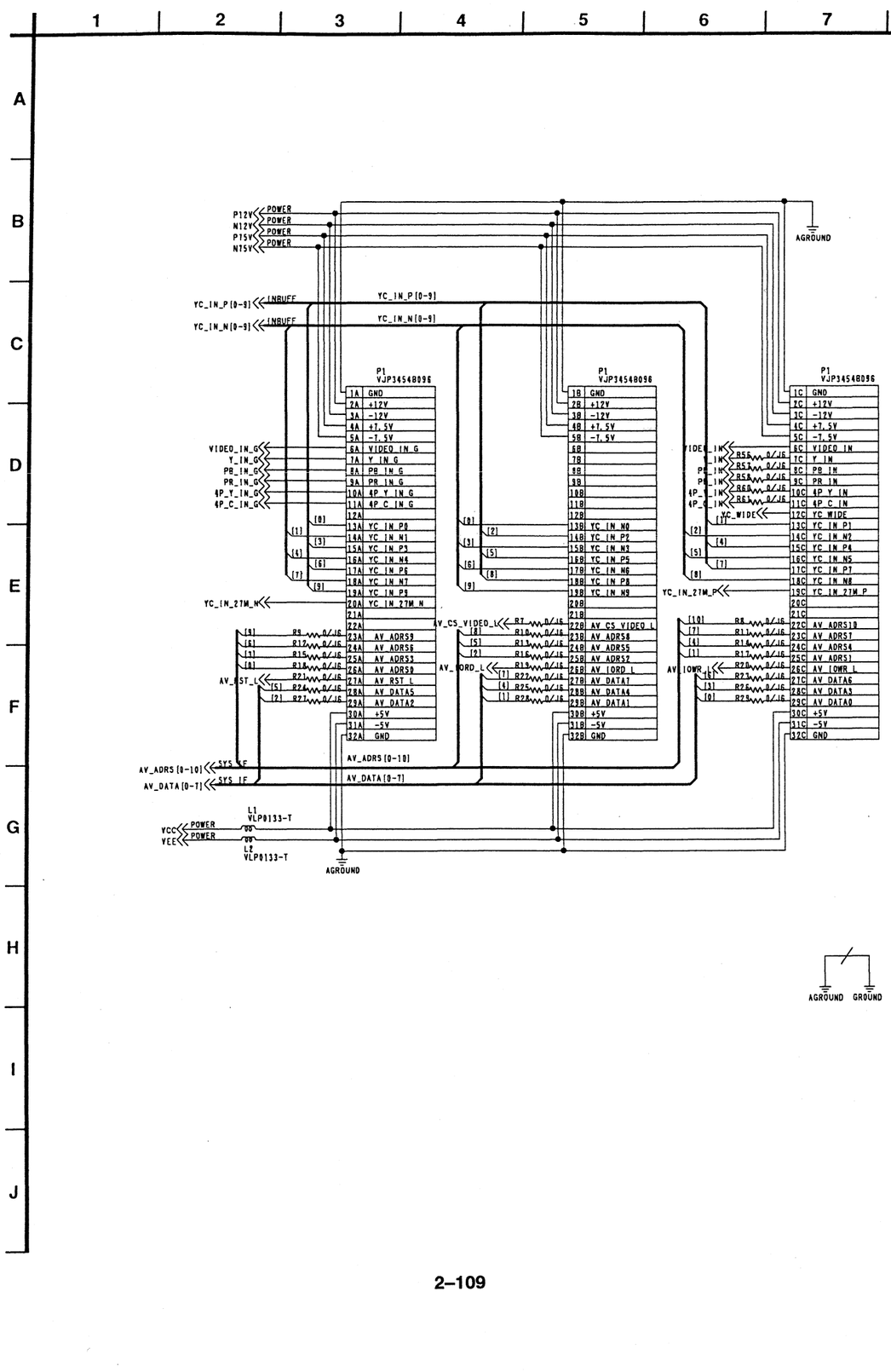


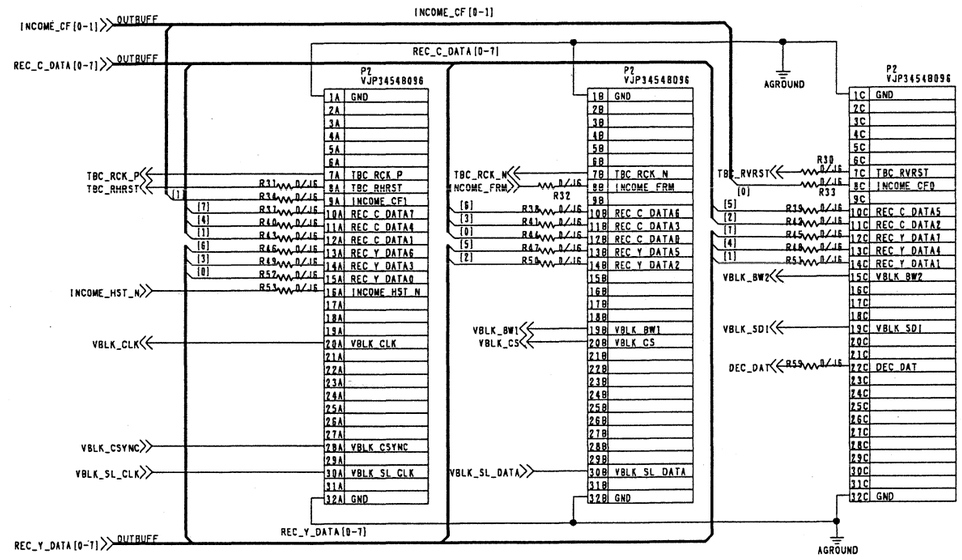
*PAT=PATTERN ONLY

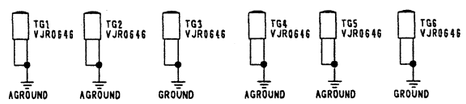
Ref No.3000 Series.

2-108

V IN CONNECTOR (F6 1/20) SCHEMATIC DIAGRAM

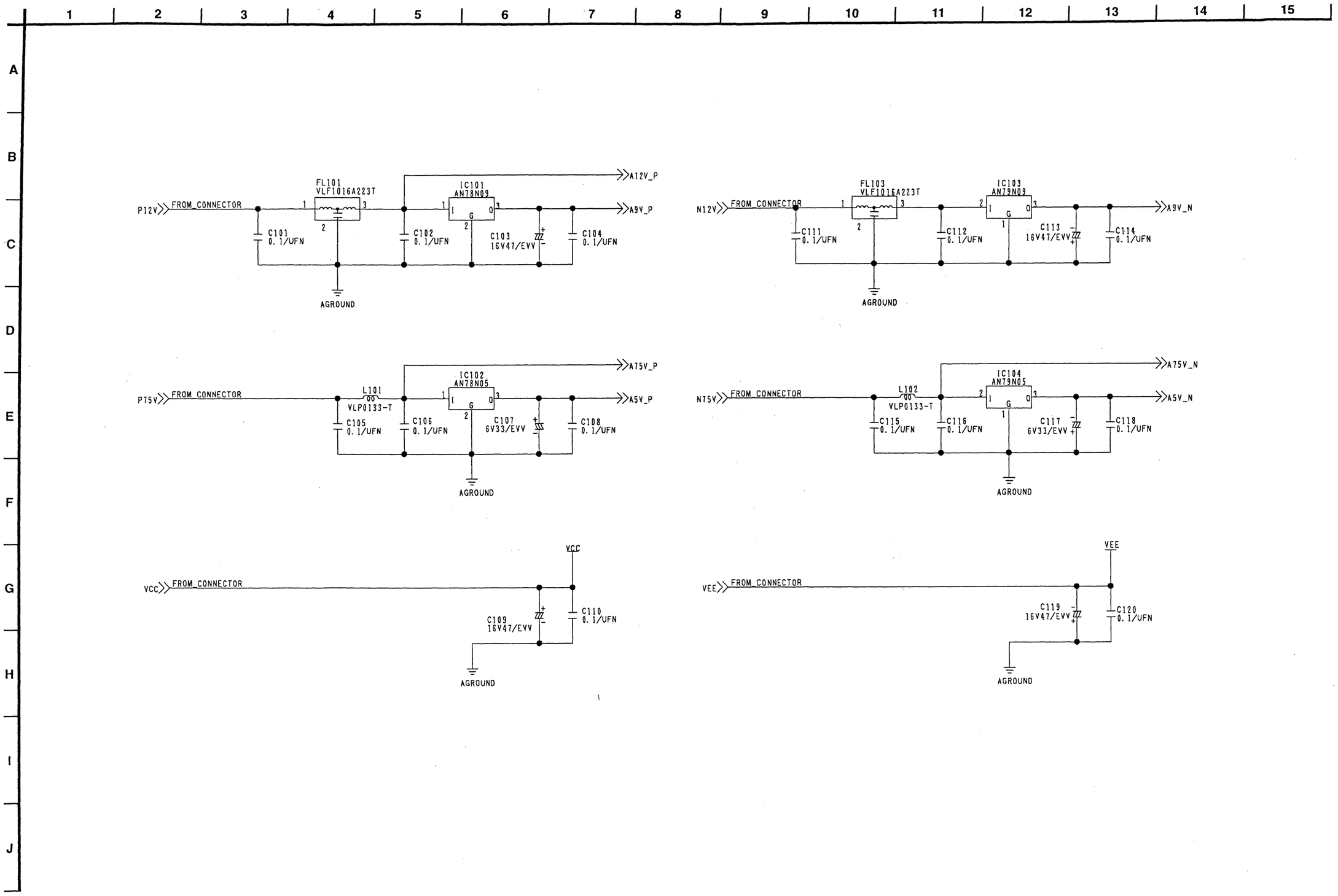






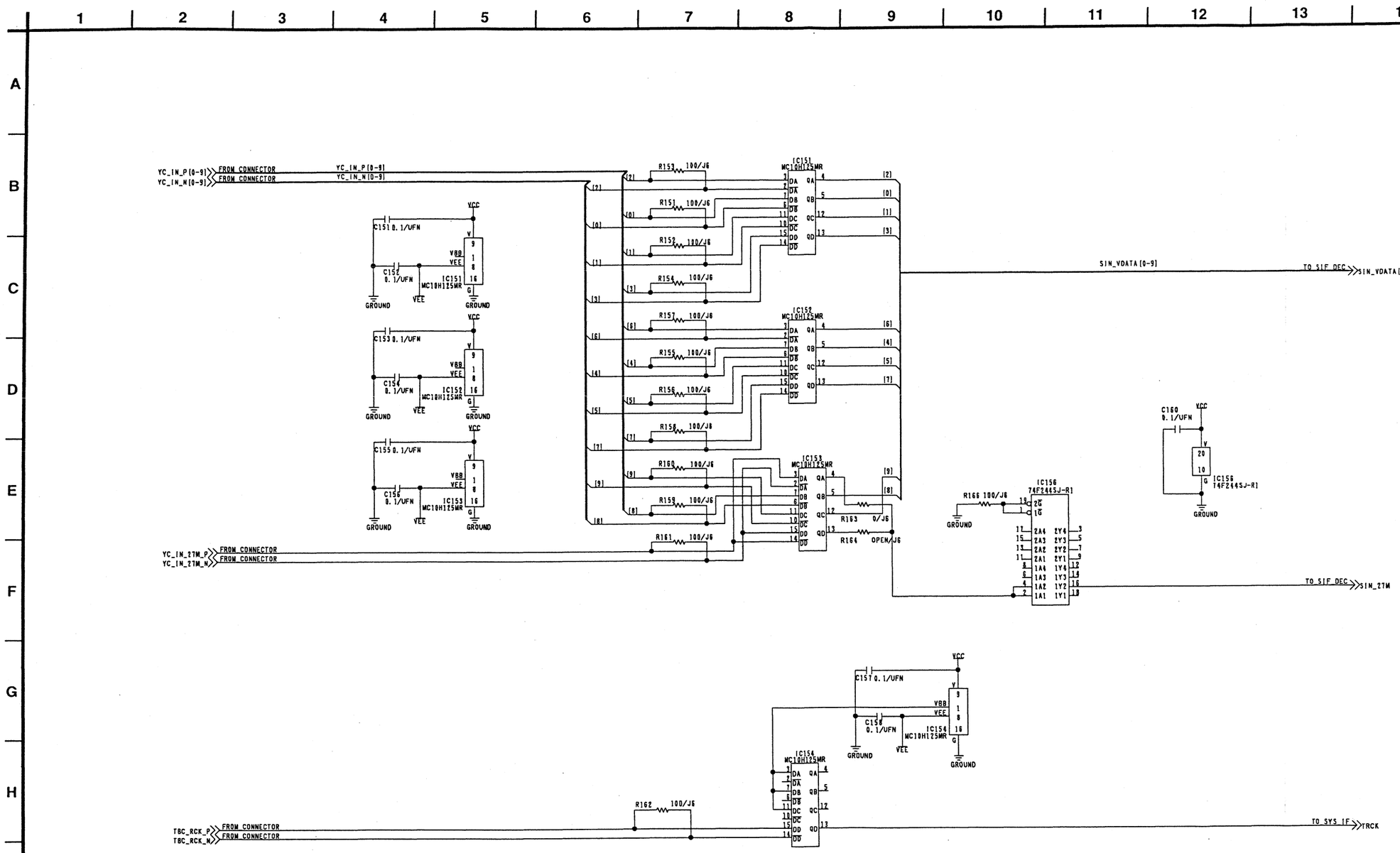
2–109

V IN POWER (F6 2/20) SCHEMATIC DIAGRAM



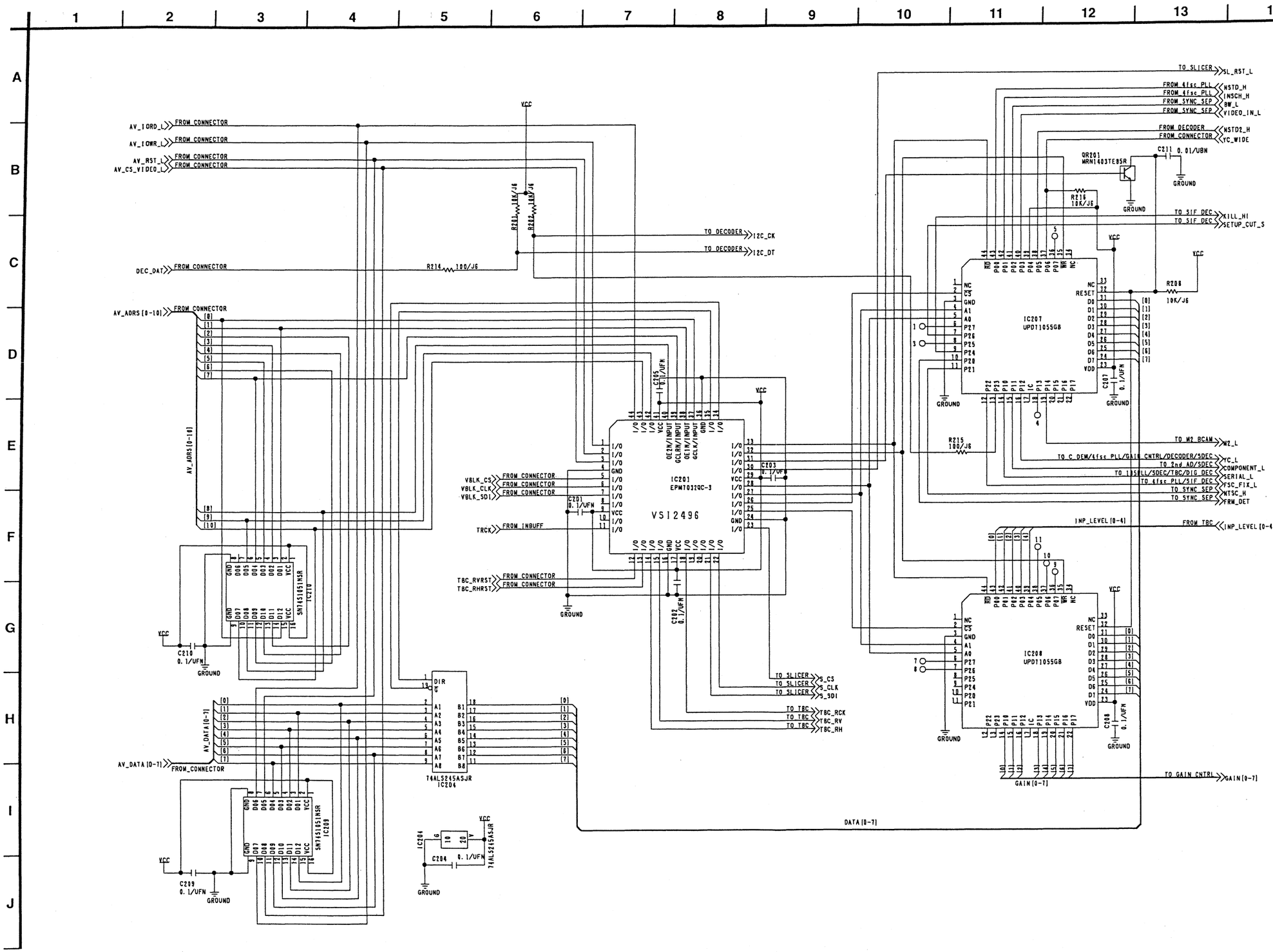
2–110

V IN IN BUFF (F6 3/20) SCHEMATIC DIAGRAM



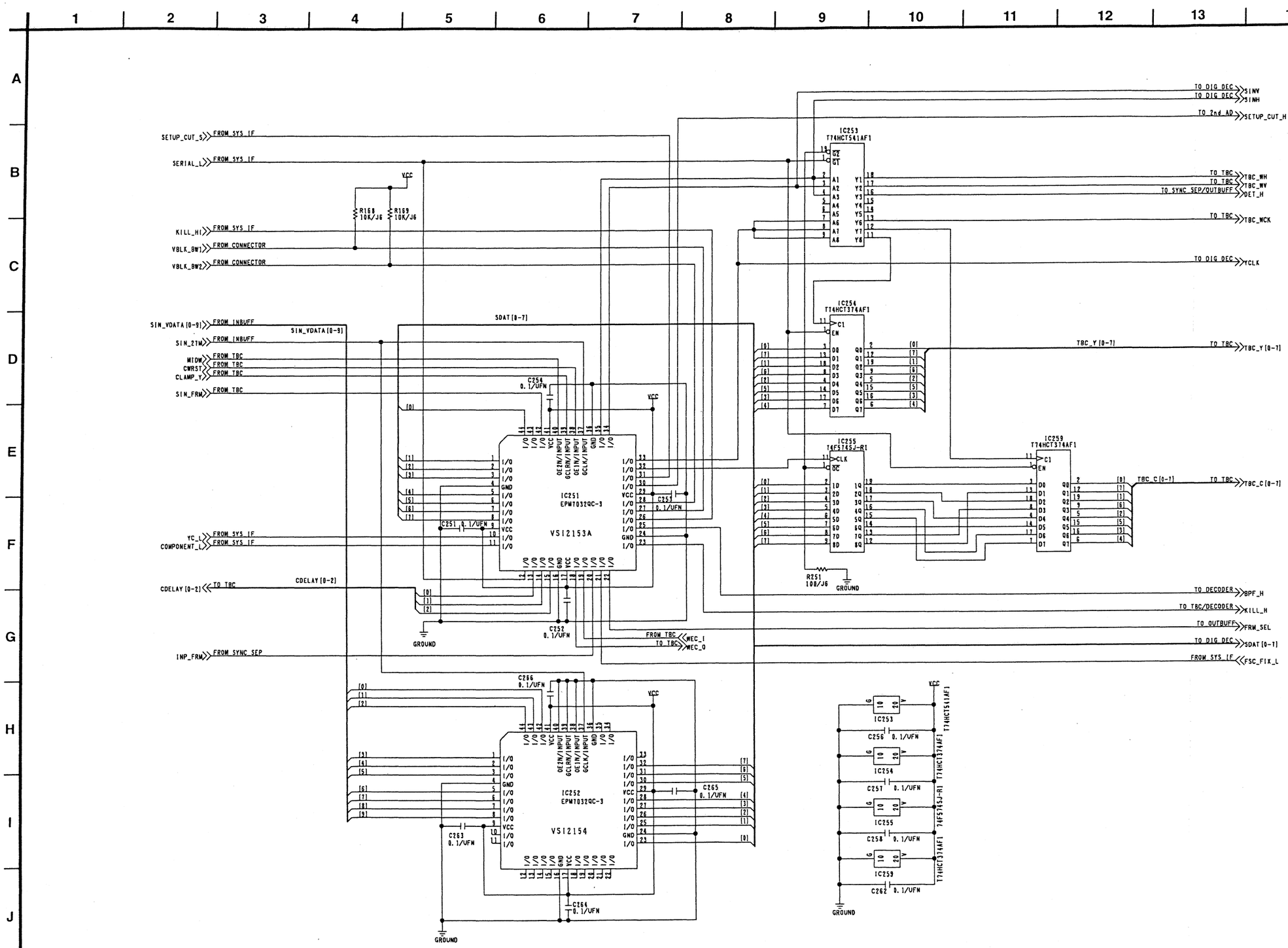
2–111

V IN SYS IF (F6 4/20) SCHEMATIC DIAGRAM



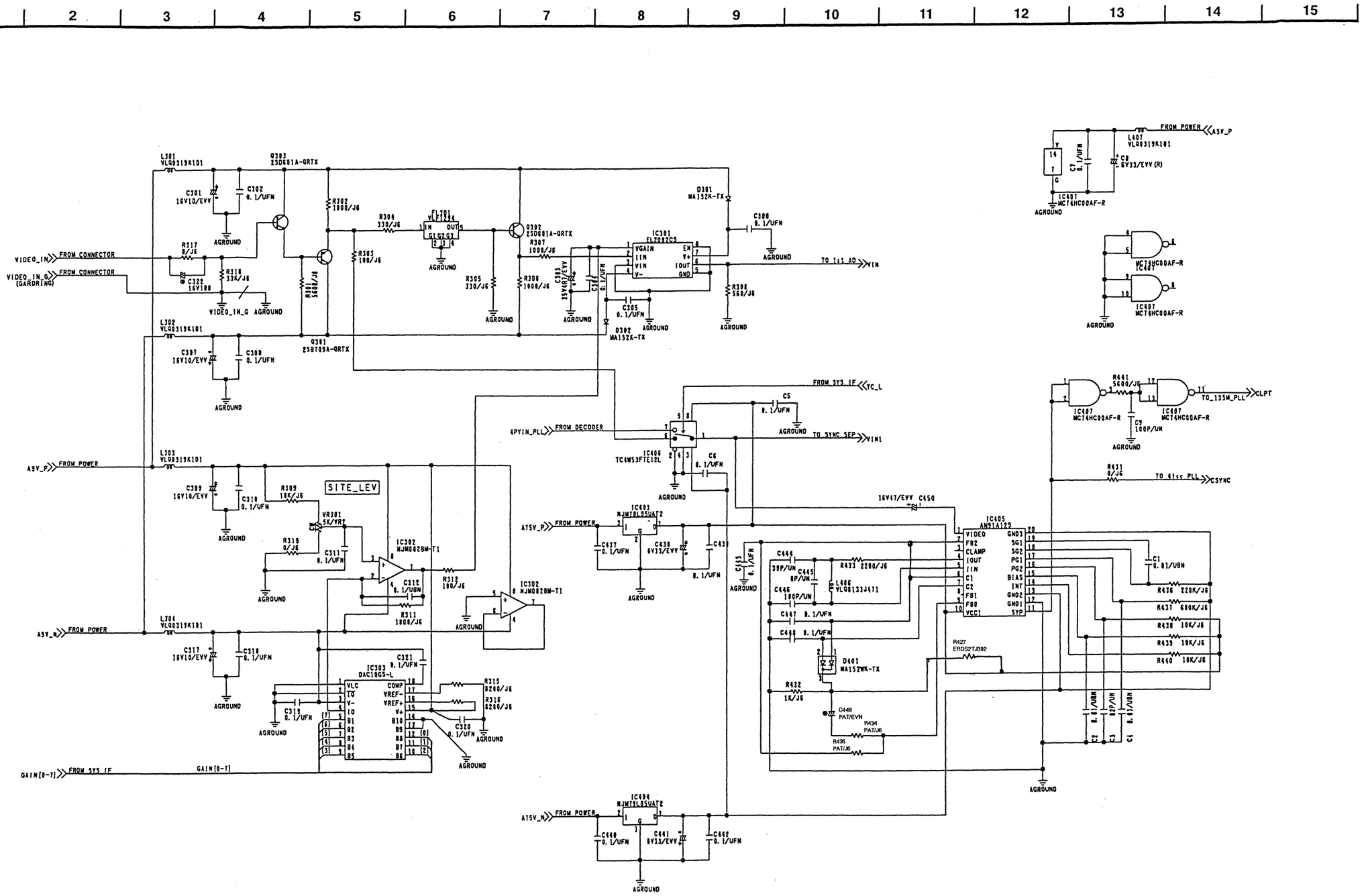
2–112

V IN SIF DEC (F6 5/20) SCHEMATIC DIAGRAM



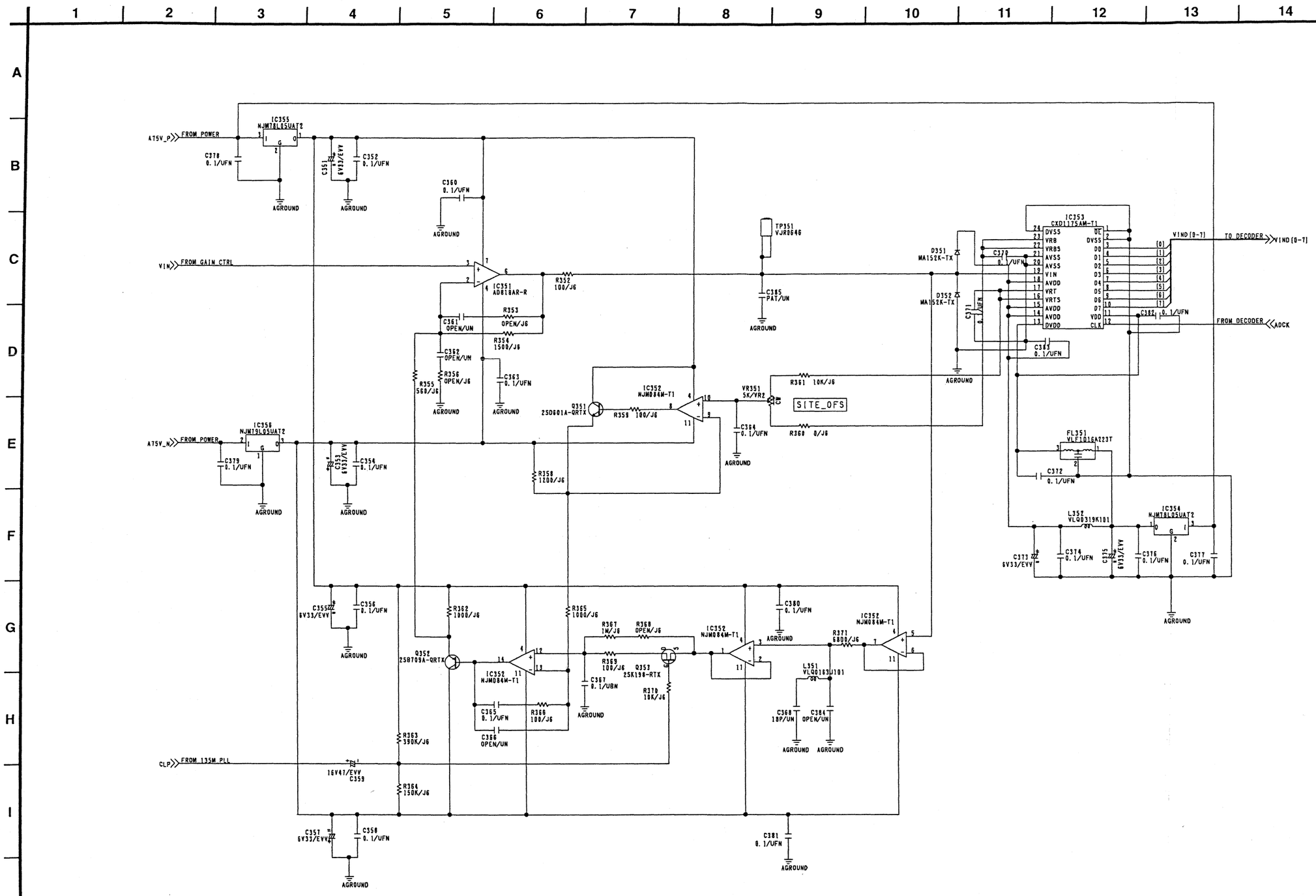
2–113

V IN GAIN CNTRL (F6 6/20) SCHEMATIC DIAGRAM



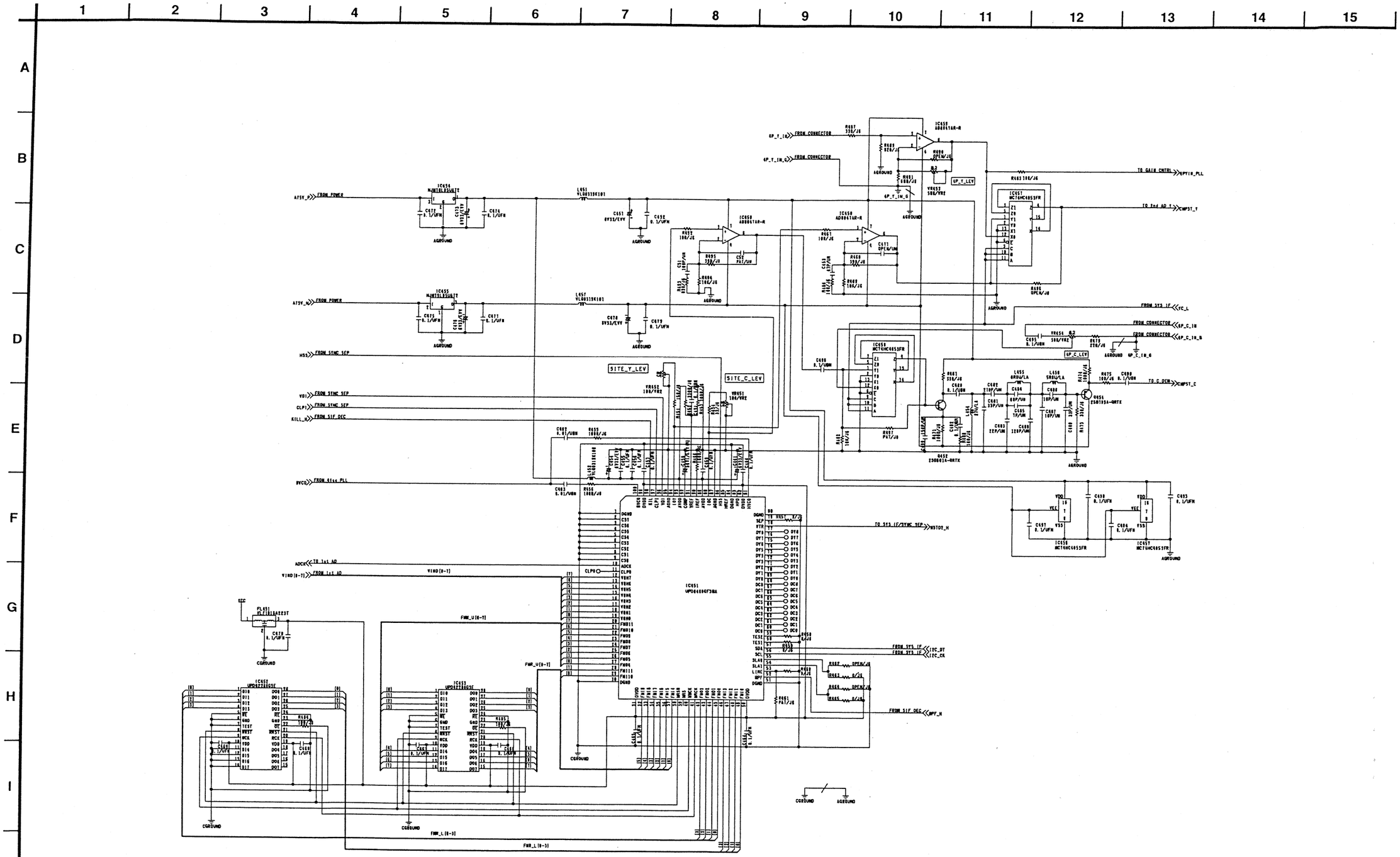
2–114

V IN 1st AD (F6 7/20) SCHEMATIC DIAGRAM



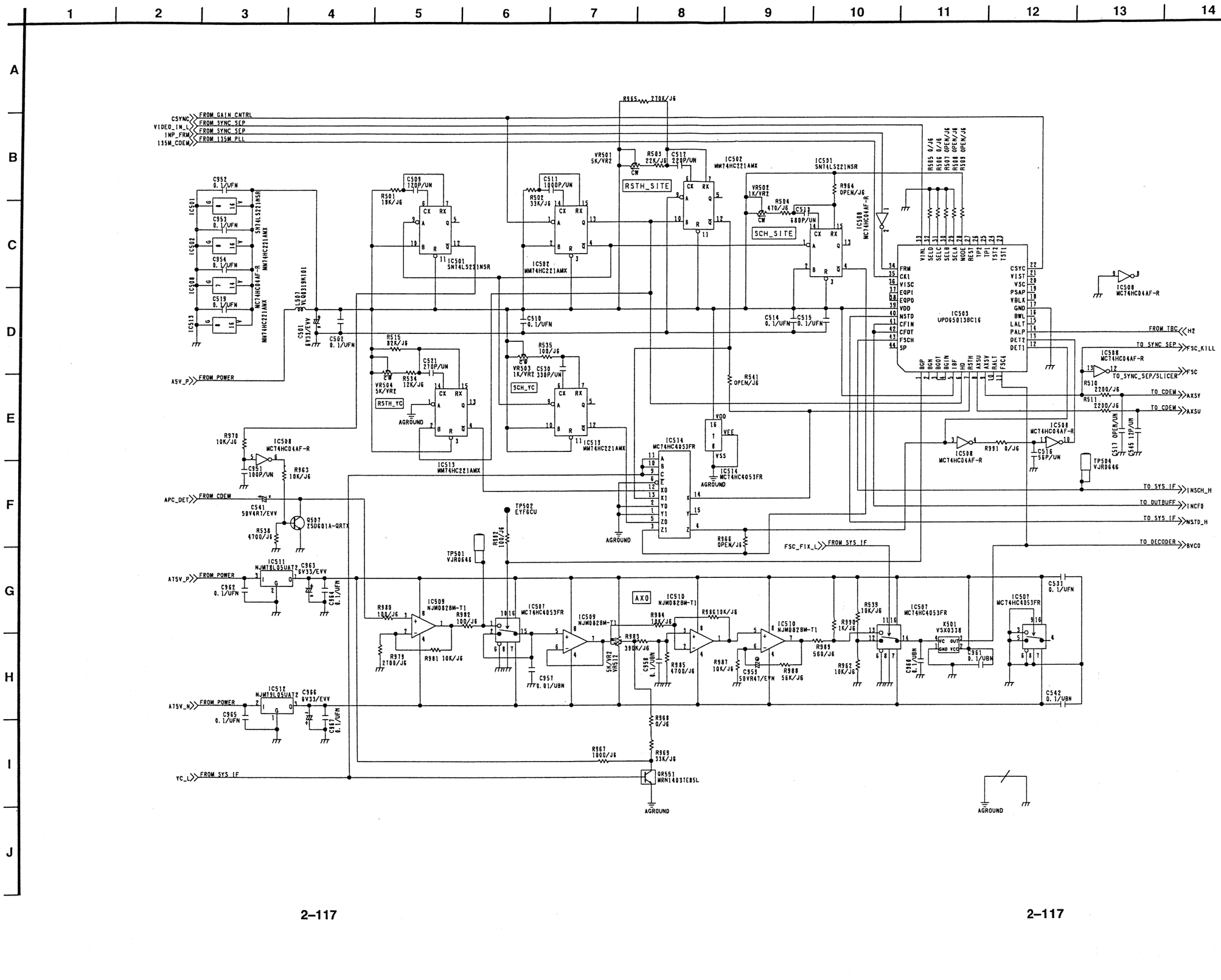
2–115

V IN DECODER (F6 8/20) SCHEMATIC DIAGRAM



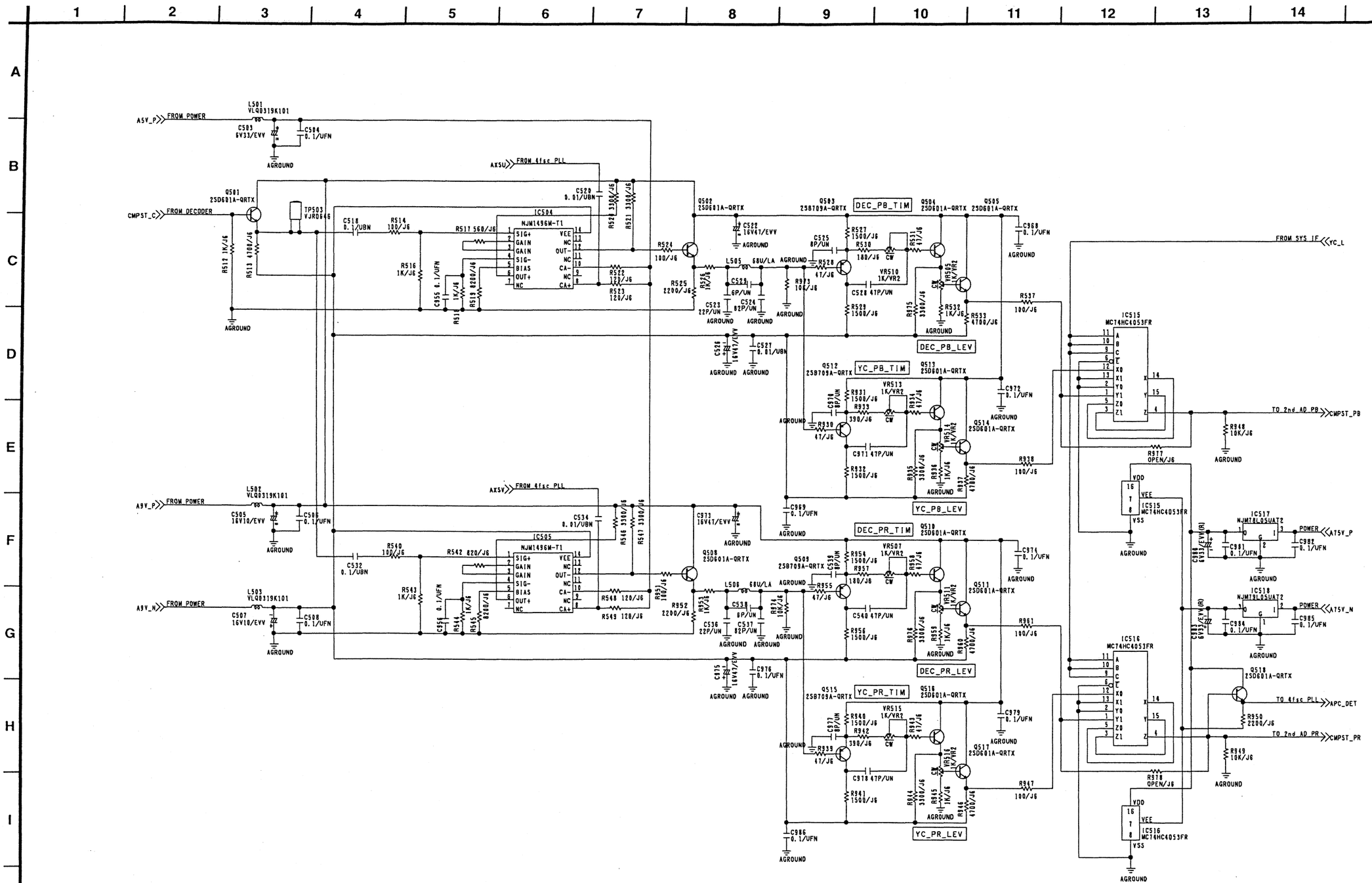
2–116

V IN 4 fsc PLL (F6 9/20) SCHEMATIC DIAGRAM



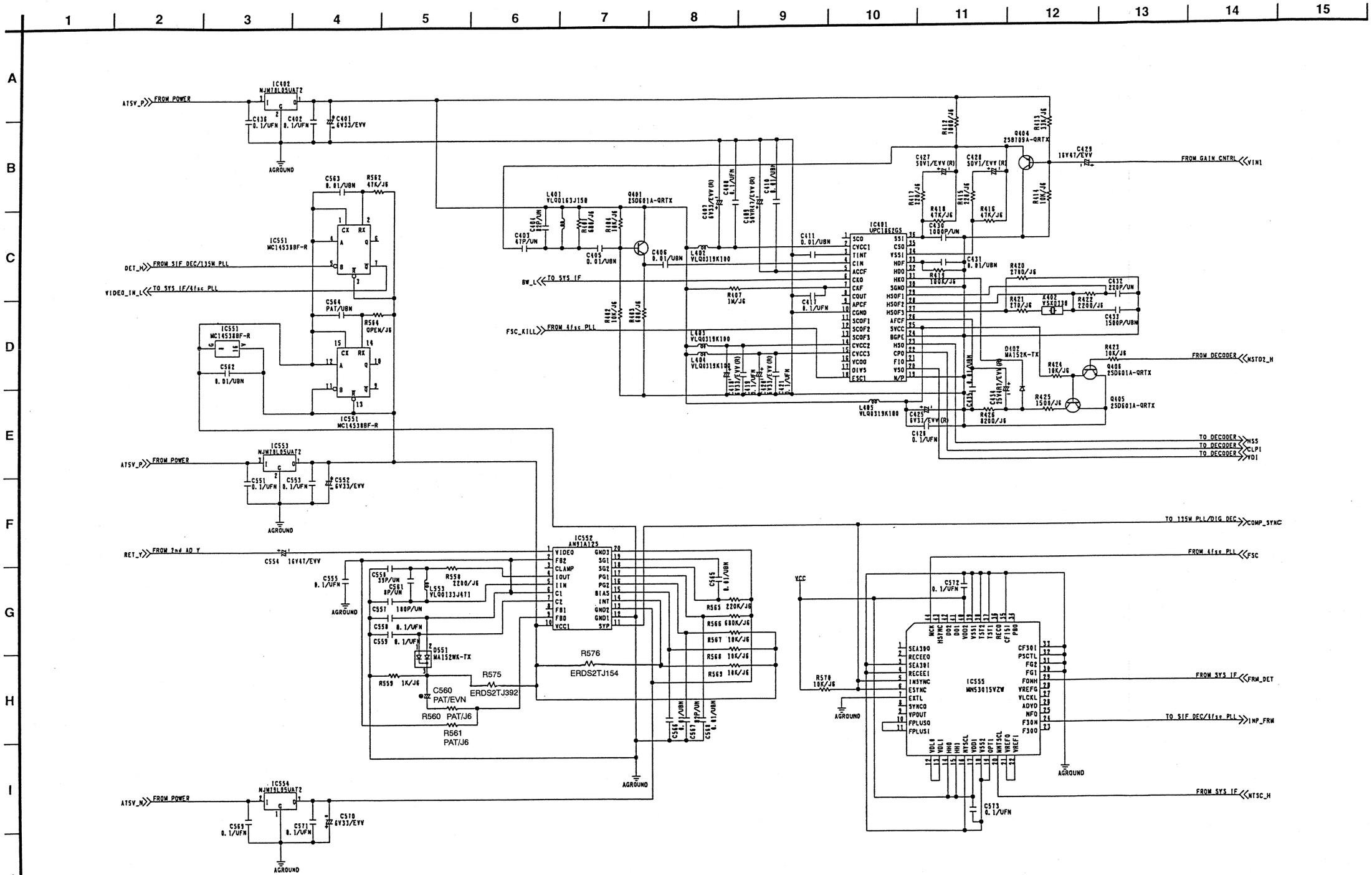
2–117

V IN C DEM (F6 10/20) SCHEMATIC DIAGRAM



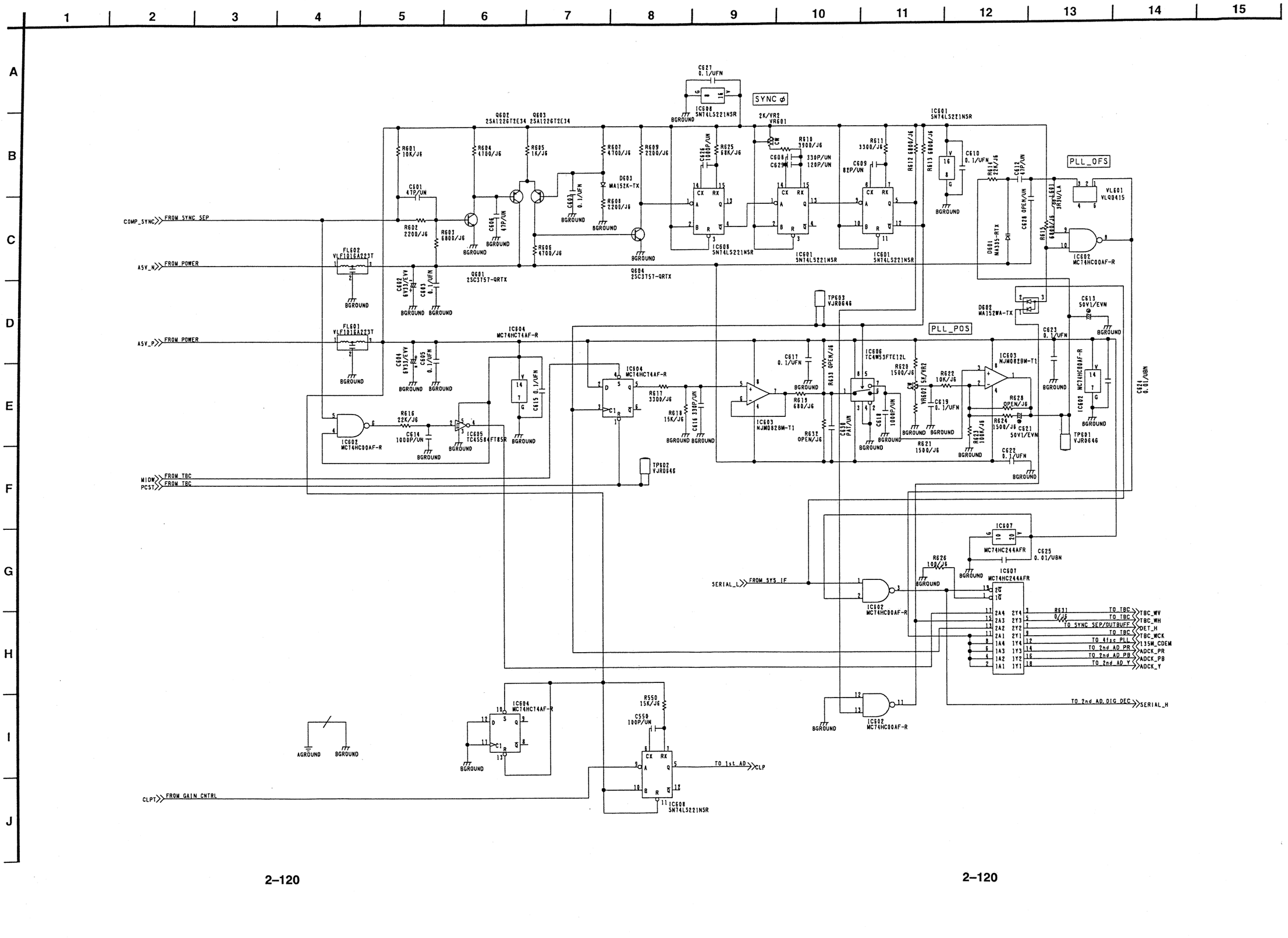
2–118

V IN SYNC SEP (F6 11/20) SCHEMATIC DIAGRAM



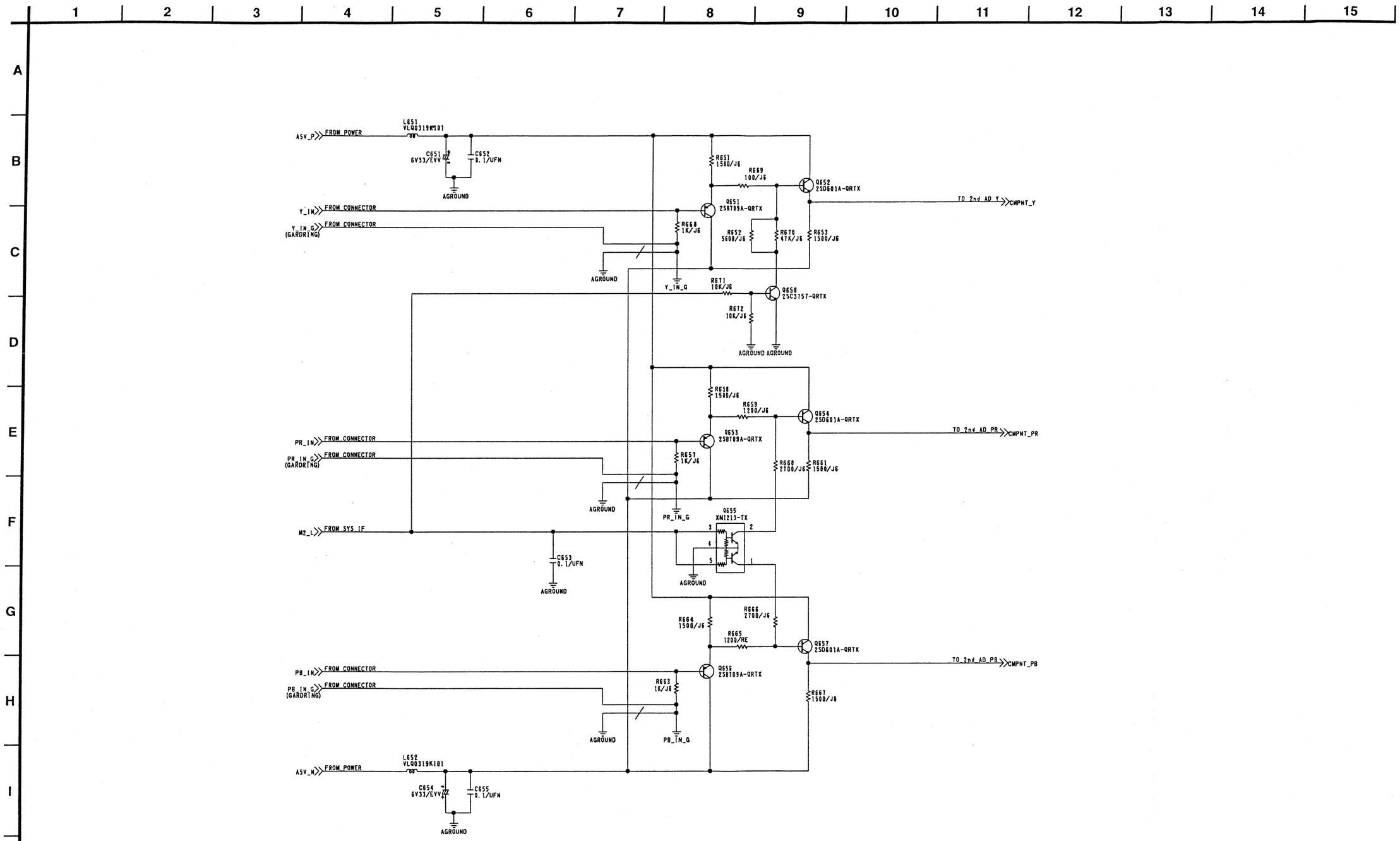
2–119

V IN 135M PLL (F6 12/20) SCHEMATIC DIAGRAM



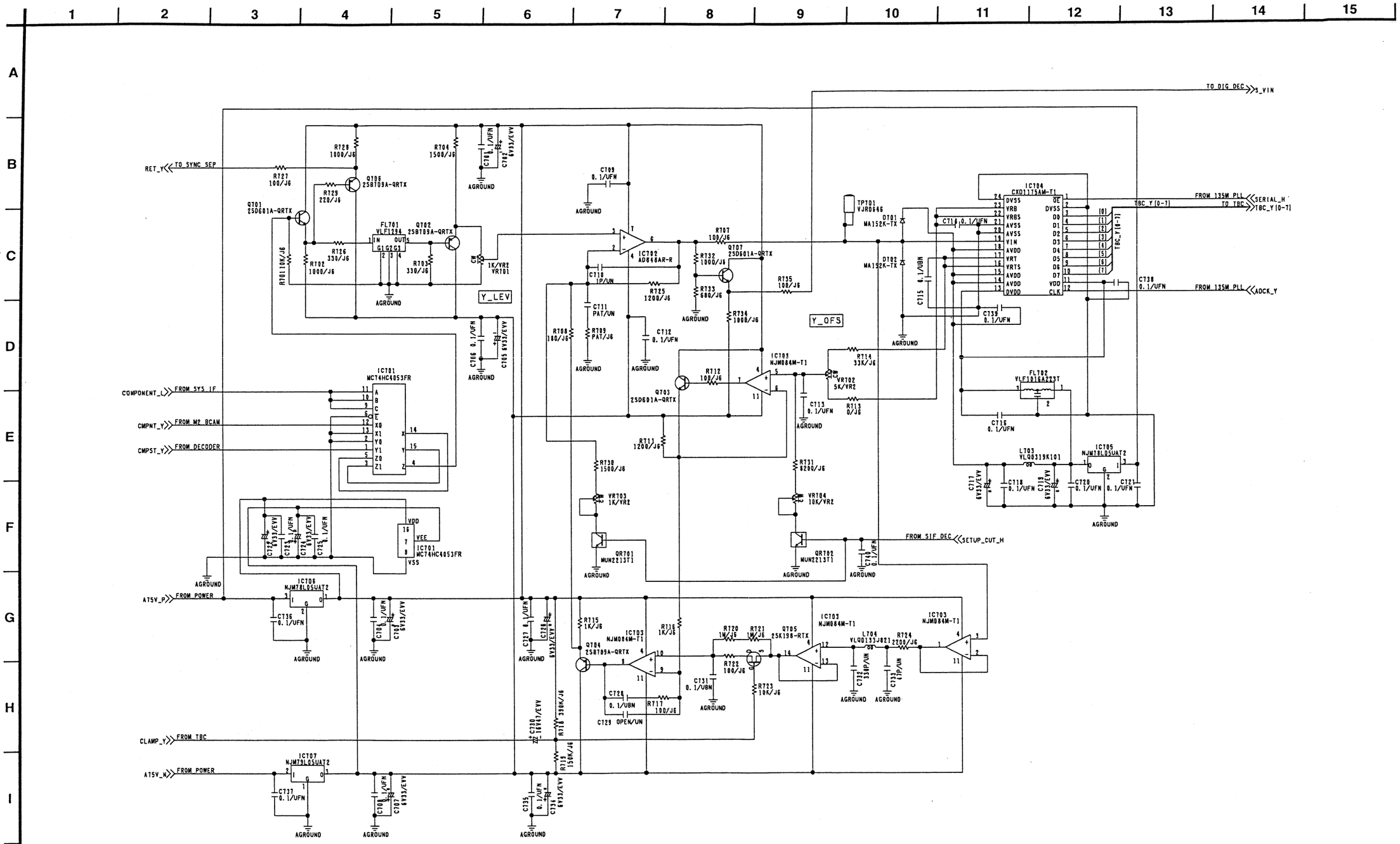
2–120

V IN M2 BCAM SELECT (F6 13/20) SCHEMATIC DIAGRAM



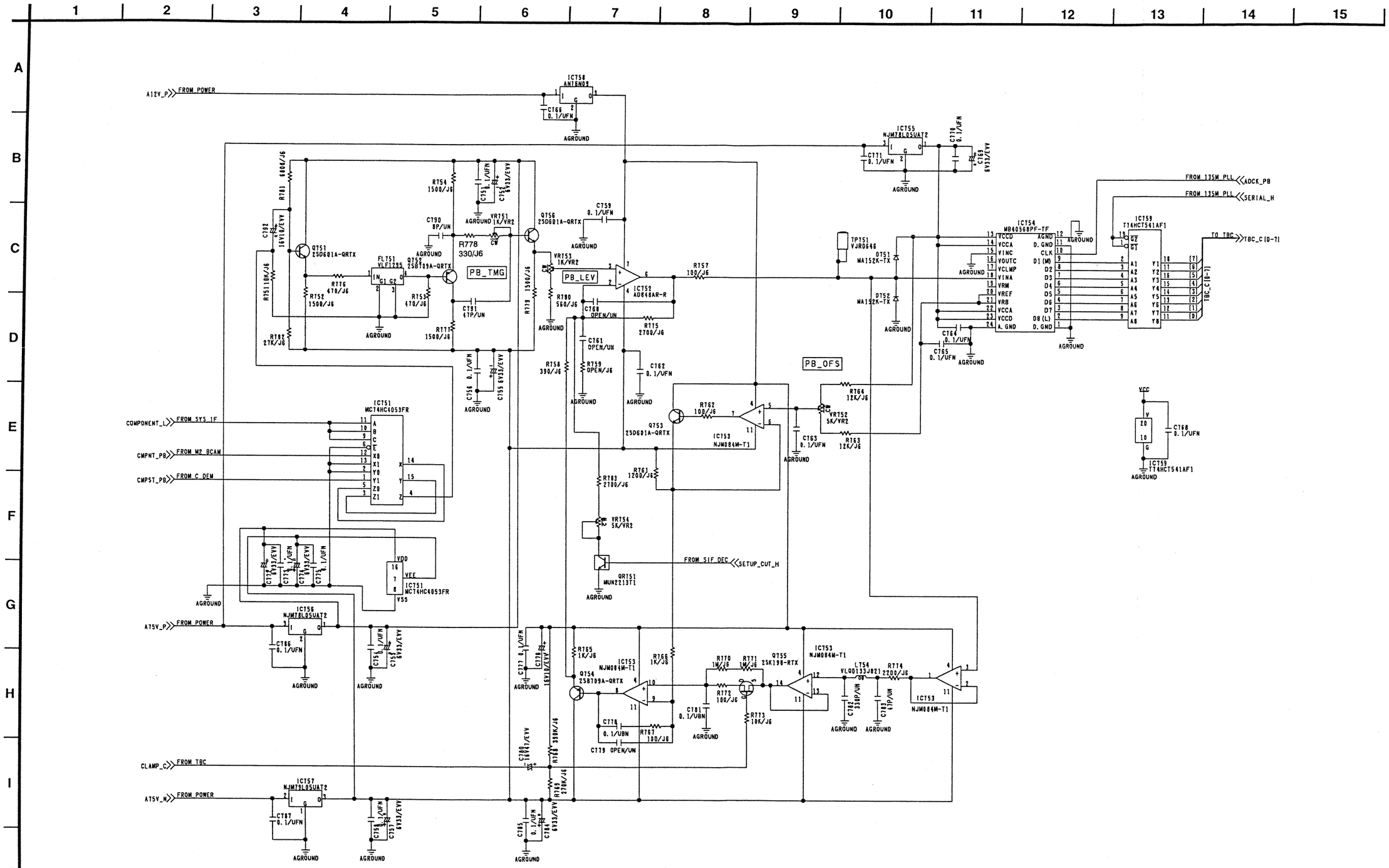
2–121

V IN 2nd AD Y (F6 14/20) SCHEMATIC DIAGRAM



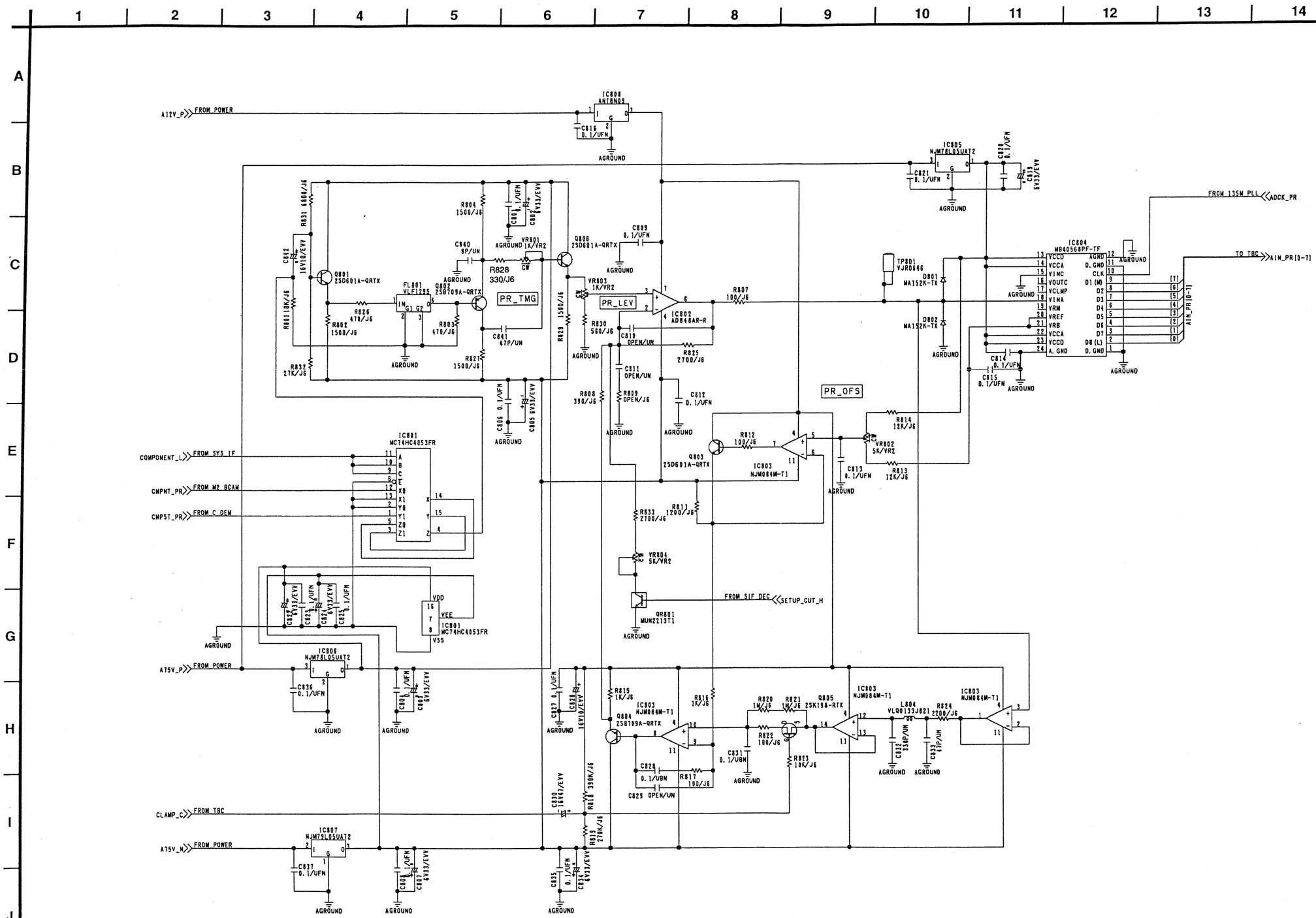
2–122

V IN 2nd AD PB (F6 15/20) SCHEMATIC DIAGRAM



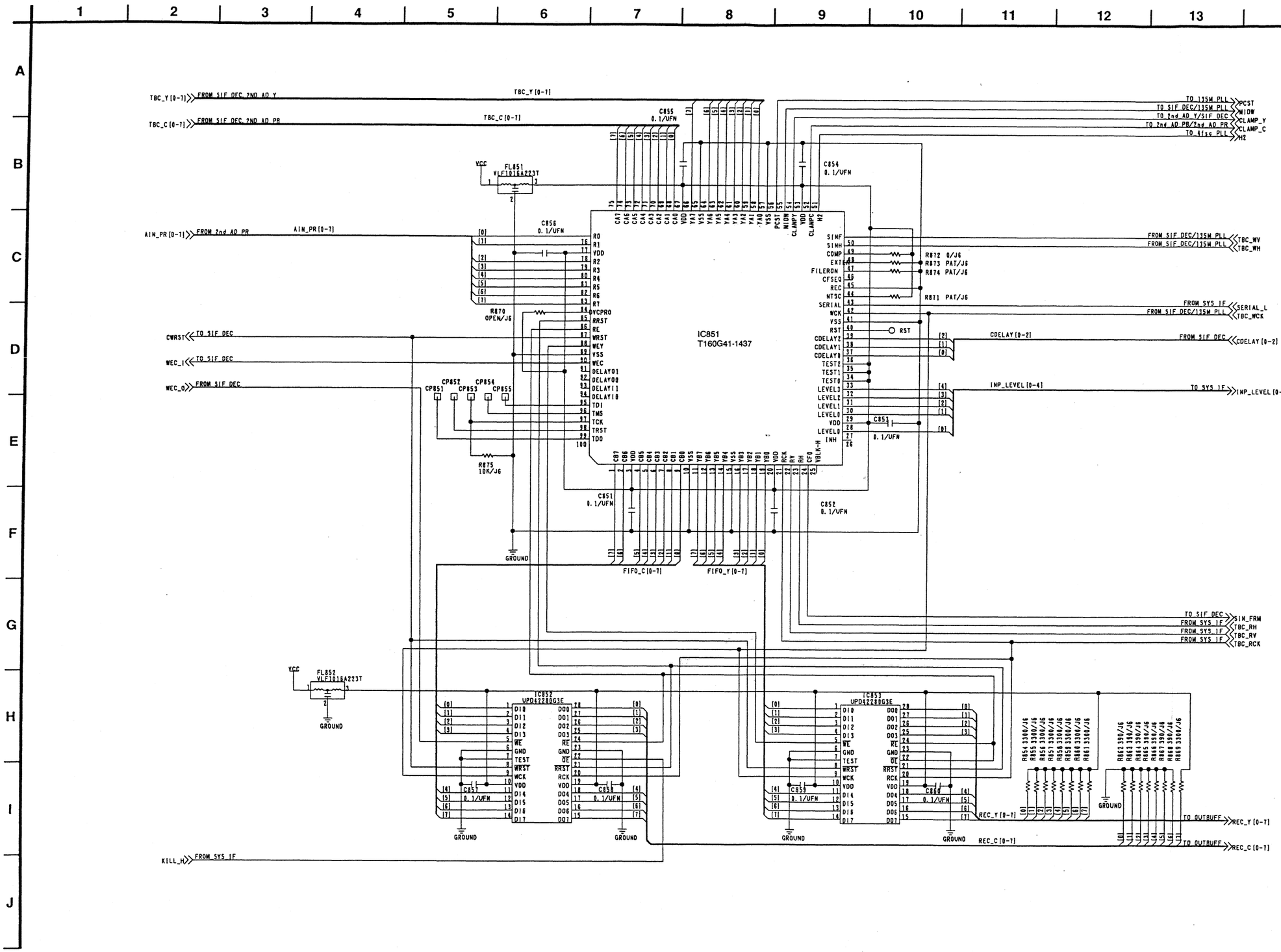
2–123

V IN 2nd AD PR (F6 16/20) SCHEMATIC DIAGRAM



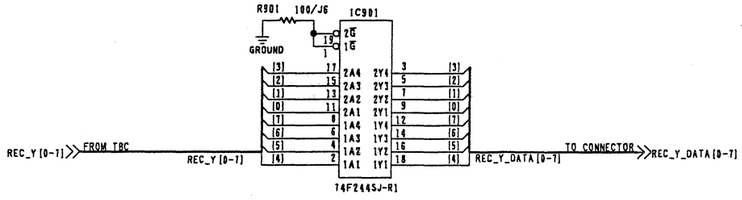
2–124

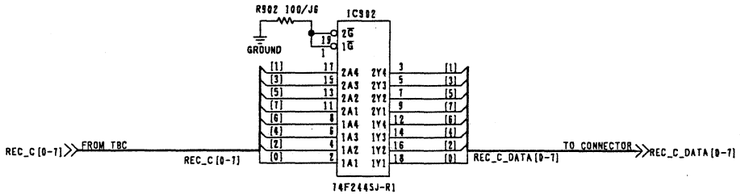
V IN TBC (F6 17/20) SCHEMATIC DIAGRAM

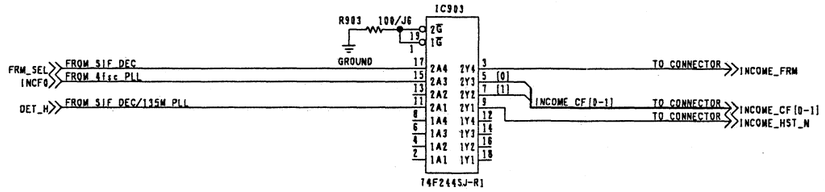


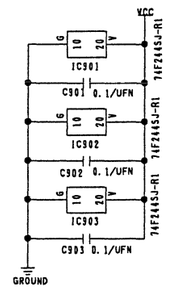
2–125

V IN OUT BUFF (F6 18/20) SCHEMATIC DIAGRAM



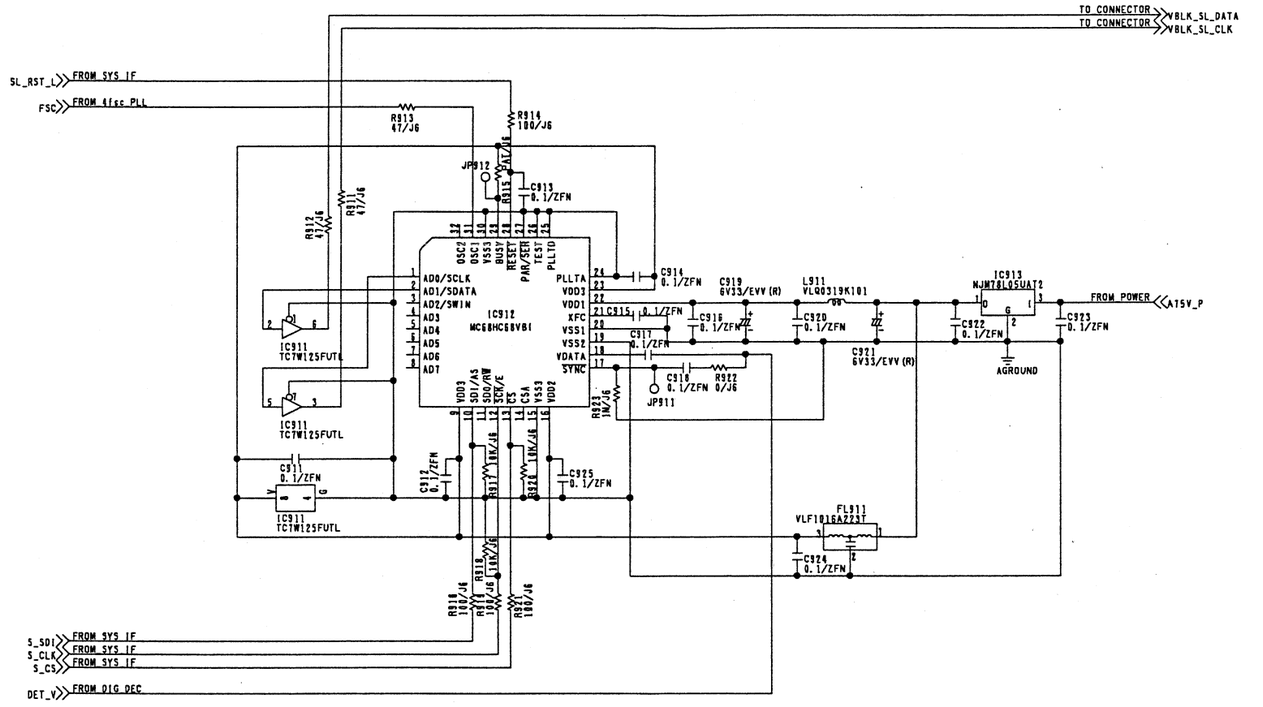






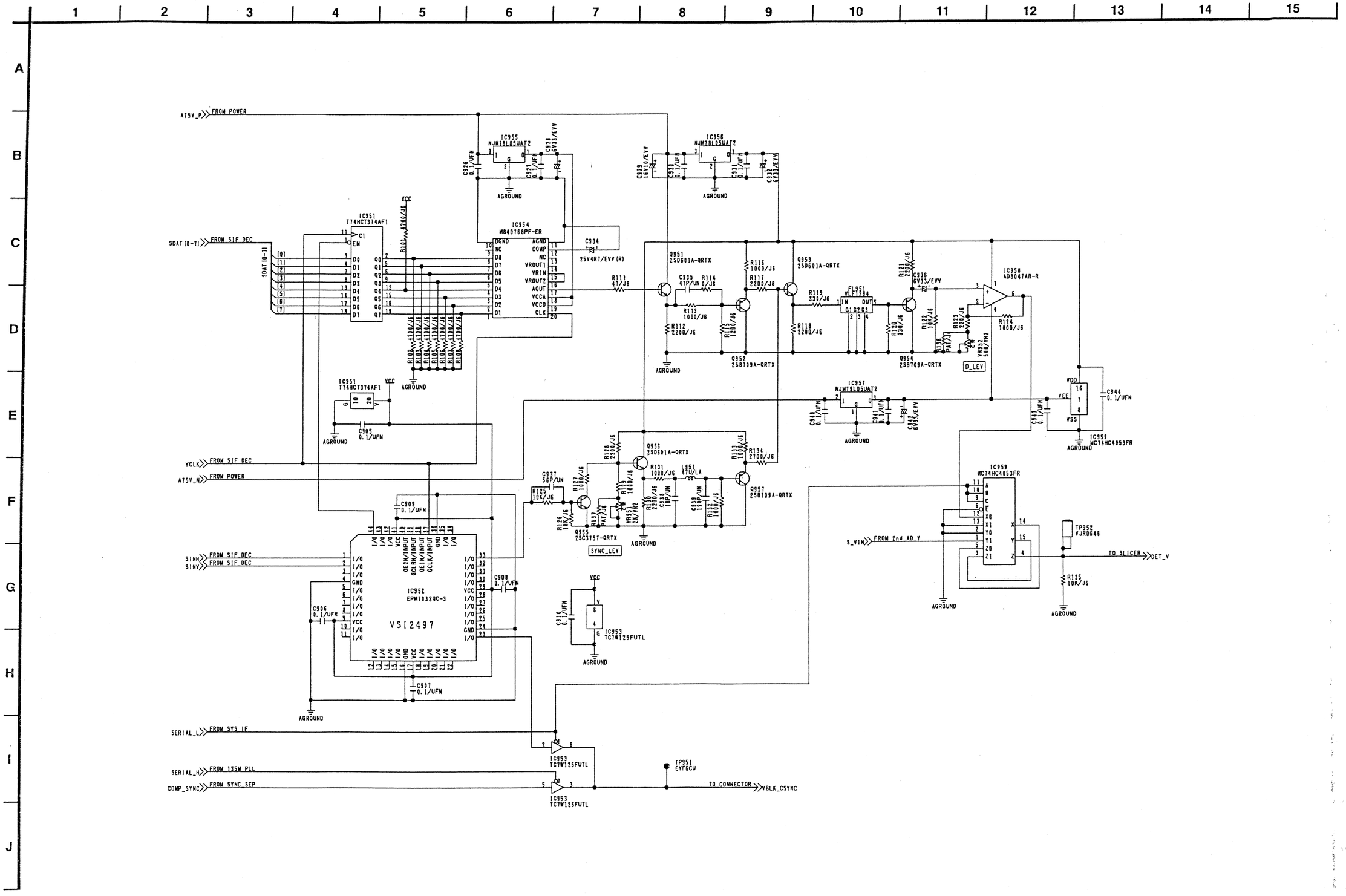
2–126

V IN SLICER (F6 19/20) SCHEMATIC DIAGRAM



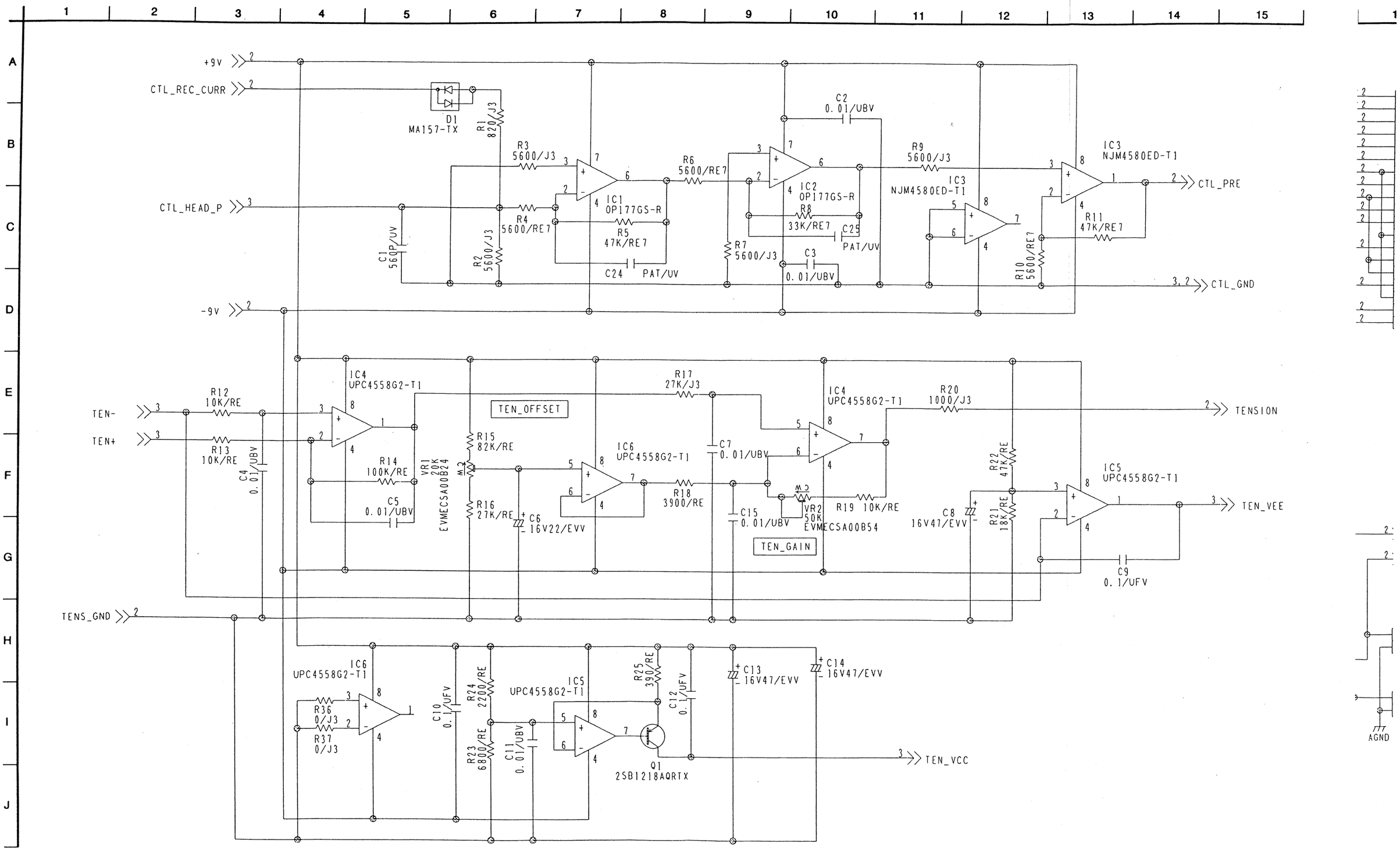
2–127A

V IN DIG DEC (F6 20/20) SCHEMATIC DIAGRAM



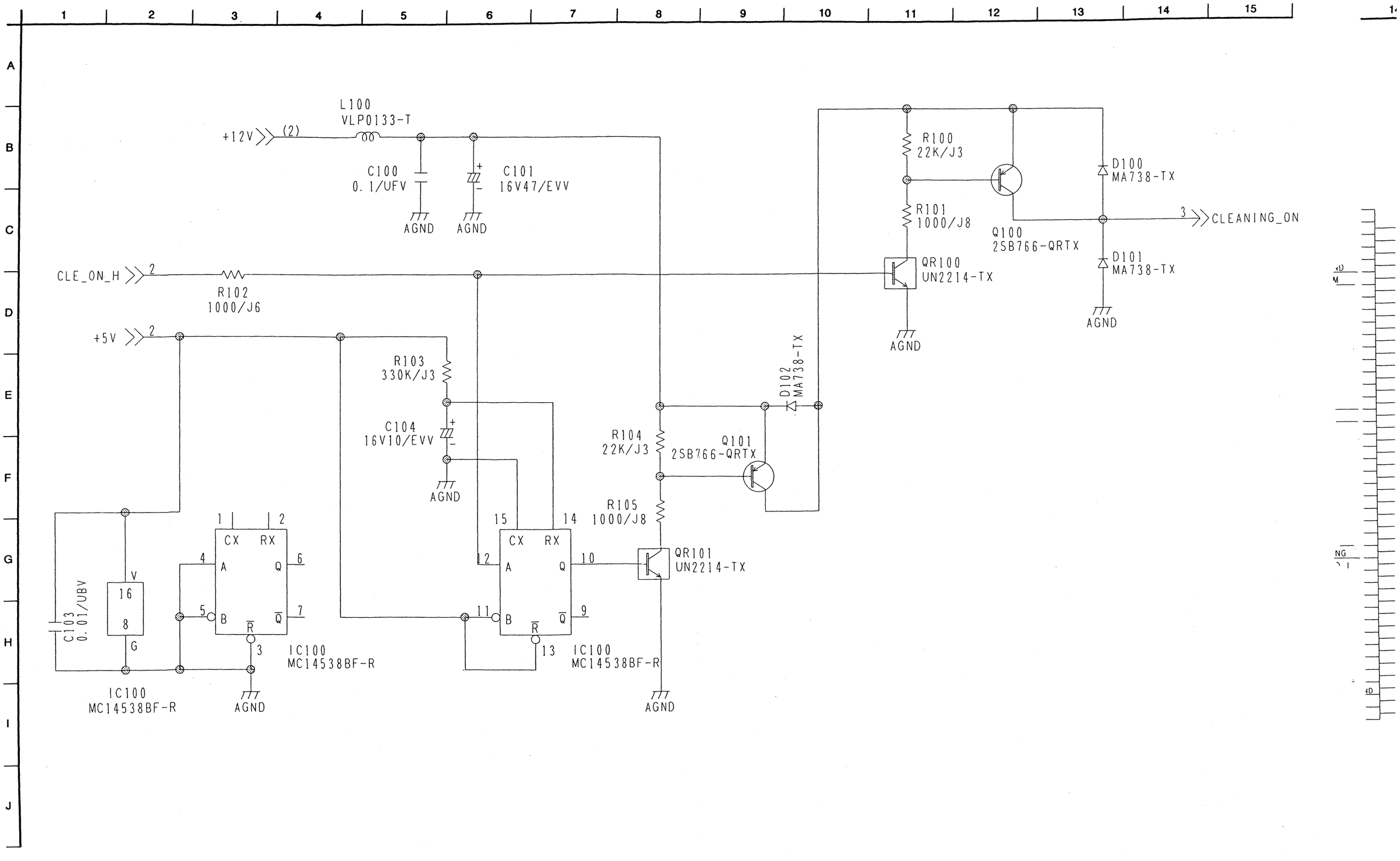
2–127B

MECHA IF (1/4) SCHEMATIC DIAGRAM



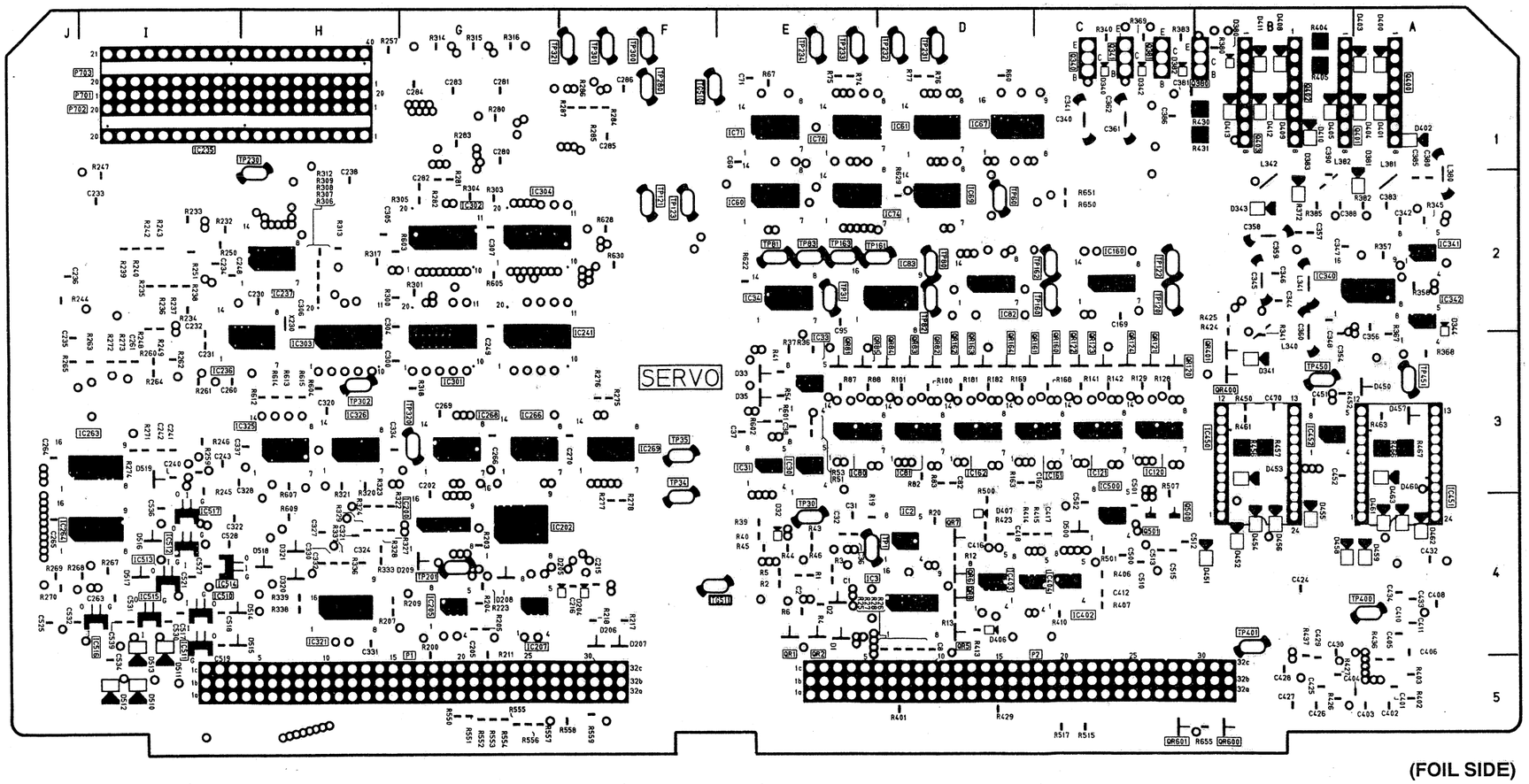
2–188

MECHA IF (4/4) SCHEMATIC DIAGRAM



2–191

F1 SERVO P.C.BOARD (VEP82105A) (FOR NTSC)
(VEP82105B) (FOR PAL)

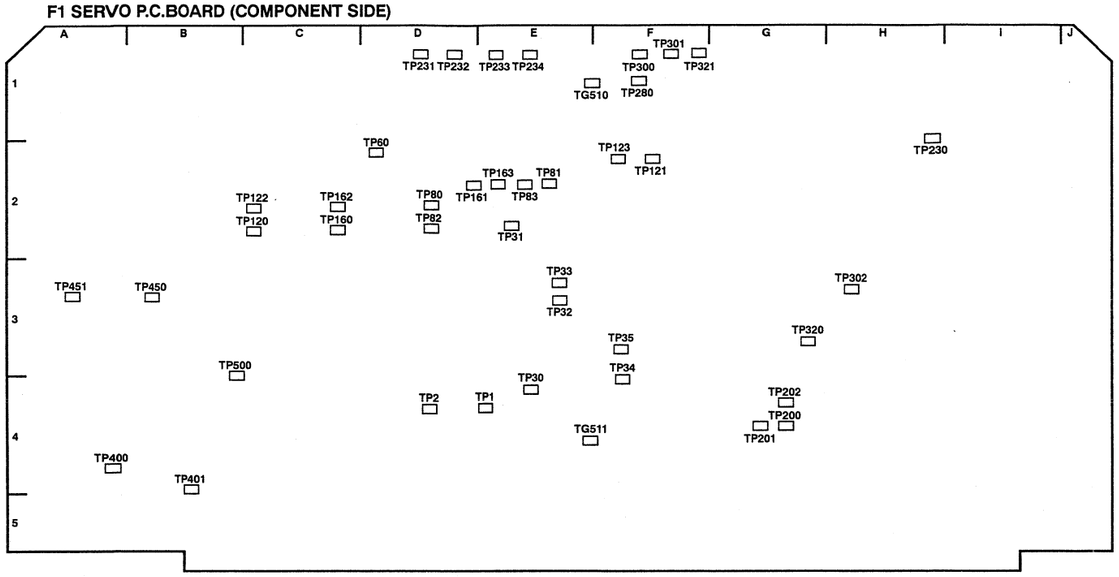


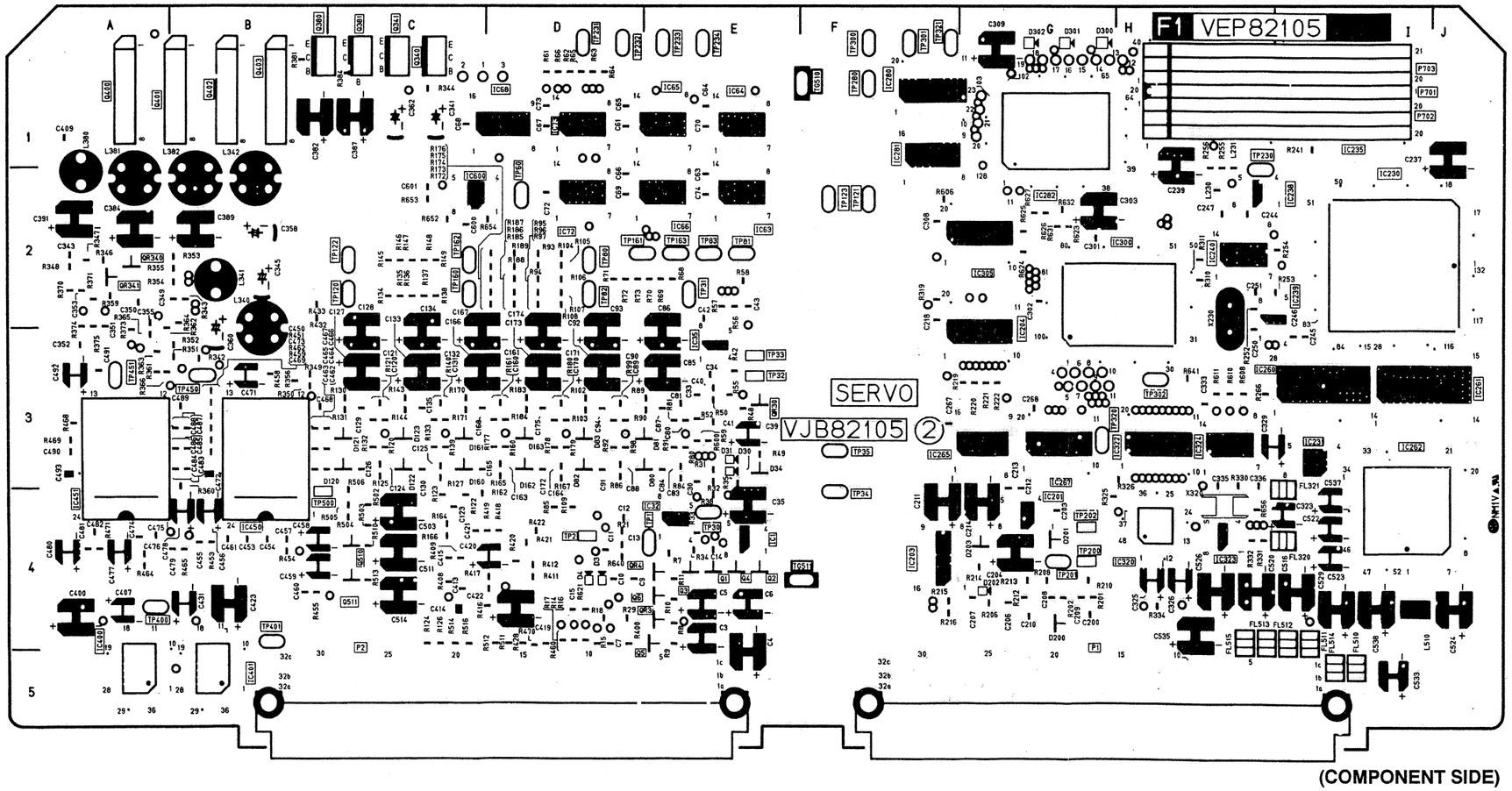
(FOIL SIDE)

F1 SERVO(FOIL SIDE)			
Transistors		IC302	G-2
Q304	C-1	IC303	H-3
Q341	C-1	IC304	G-2
Q380	B-1	IC321	H-4
Q381	C-1	IC325	H-3
Q400	A-1	IC326	H-3
Q401	A-1	IC340	B-2
Q402	B-1	IC341	A-2
Q403	B-1	IC342	A-2
Q500	C-4	IC402	C-4
Q501	C-4	IC403	D-4
Transistor & Resistors		IC404	C-4
QR1	E-4	IC450	B-3
QR2	E-4	IC451	A-3
QR5	D-4	IC452	B-3
QR6	D-4	IC500	C-3
QR7	D-4	IC510	I-4
QR8	D-4	IC511	I-4
QR81	E-3	IC512	I-4
QR82	D-3	IC513	I-4
QR83	D-3	IC514	I-4
QR84	D-3	IC515	I-4
QR85	E-3	IC516	I-4
QR120	C-3	IC517	I-4
QR121	C-3	**Test Points**	
QR122	C-3	TG510	F-1
QR123	C-3	TG511	F-4
QR124	C-3	TP1	D-4
QR160	C-3	TP30	E-4
QR161	D-3	TP31	E-2
QR162	D-3	TP34	F-3
QR163	D-3	TP35	F-3
QR164	D-3	TP60	D-2
QR400	B-3	TP80	D-2
QR401	B-3	TP81	E-2
QR600	B-5	TP82	D-2
QR601	C-5	TP83	E-2
Integrated Circuits		TP120	C-2
IC2	D-4	TP121	F-2
IC3	E-4	TP122	C-2
IC30	E-3	TP123	F-2
IC31	E-3	TP160	C-2
IC33	E-3	TP161	E-2
IC34	E-2	TP162	C-2
IC60	E-2	TP163	E-2
IC61	D-1	TP201	G-4
IC67	D-1	TP230	H-1
IC69	D-2	TP231	D-1
IC70	E-1	TP232	D-1
IC71	E-1	TP233	E-1
IC74	E-2	TP234	E-1
IC80	E-3	TP280	F-1
IC81	D-3	TP300	F-1
IC82	D-2	TP301	F-1
IC83	D-2	TP302	H-3
IC120	C-3	TP320	G-3
IC121	C-3	TP321	F-1
IC160	C-2	TP400	A-4
IC161	C-3	TP401	B-4
IC162	D-3	TP450	B-3
IC200	G-4	TP451	A-3
IC202	G-4	**Connectors**	
IC205	G-4	P1	G-5
IC207	G-4	P2	D-5
IC235	I-1	P701	I-1
IC236	I-3	P702	I-1
IC237	H-2	P703	I-1
IC241	F-2		
IC263	I-3		
IC264	J-4		
IC266	G-3		
IC268	G-3		
IC269	F-3		
IC301	G-3		

ADDRESS INFORMATION

F1 SERVO P.C.BOARD (COMPONENT SIDE)



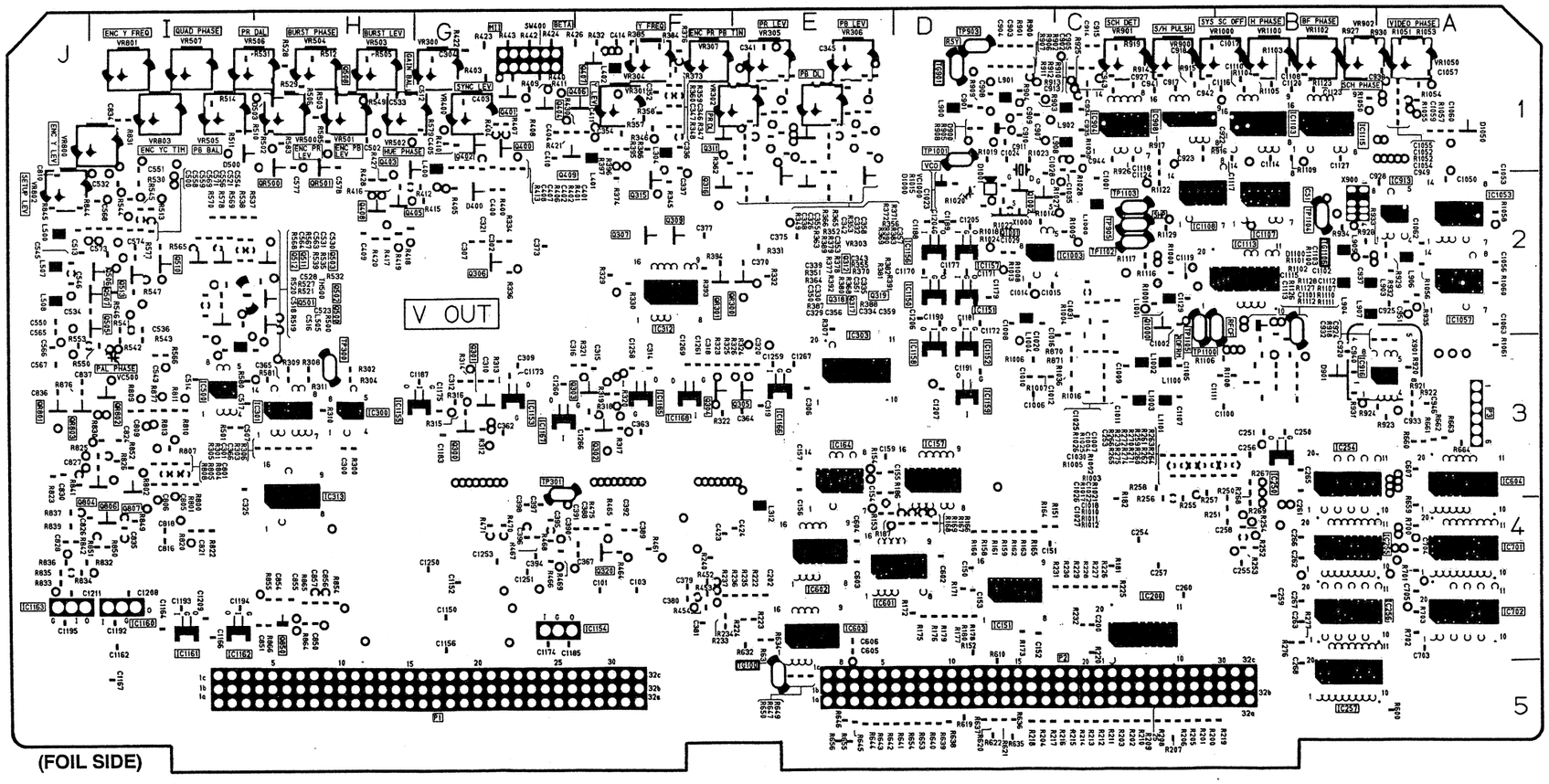


(COMPONENT SIDE)

F1 SERVO(COMPONENT SIDE)			
Transistors		TP80	D-2
Q1	E-4	TP81	E-2
Q2	E-4	TP82	D-2
Q3	E-4	TP83	E-2
Q4	E-4	TP120	C-2
Q5	E-4	TP121	F-2
Q6	D-4	TP122	C-2
Q340	C-1	TP123	F-2
Q341	C-1	TP160	C-2
Q380	B-1	TP161	D-2
Q381	C-1	TP162	C-2
Q400	A-1	TP163	E-2
Q401	A-1	TP200	G-4
Q402	B-1	TP201	G-4
Q403	B-1	TP202	G-4
Q510	C-4	TP230	H-1
Q511	C-4	TP231	D-1
Transistor & Resistors		TP232	D-1
QR3	E-4	TP233	E-1
QR4	D-4	TP234	E-1
QR30	E-3	TP280	F-1
QR340	A-2	TP300	F-1
QR341	A-2	TP301	F-1
Integrated Circuits		TP302	H-3
IC1	E-4	TP320	G-3
IC32	E-4	TP321	F-1
IC35	E-3	TP400	A-4
IC63	E-2	TP401	B-4
IC64	E-1	TP450	B-3
IC65	E-1	TP451	A-3
IC66	E-2	TP500	B-4
IC68	D-1	**Connectors**	
IC72	D-2	P1	G-5
IC73	D-1	P2	C-5
IC201	G-4	P701	I-1
IC203	F-4	P702	I-1
IC204	G-3	P703	I-1
IC230	I-2		
IC231	I-3		
IC235	I-1		
IC238	I-2		
IC239	I-2		
IC240	H-2		
IC260	I-3		
IC261	J-3		
IC262	I-3		
IC265	F-3		
IC267	G-3		
IC280	F-1		
IC281	F-1		
IC282	G-2		
IC300	G-2		
IC305	G-2		
IC320	H-4		
IC322	H-3		
IC323	H-4		
IC324	H-3		
IC400	A-4		
IC401	B-5		
IC450	B-4		
IC451	A-4		
IC600	C-2		
Test Points			
TG510	F-1		
TG511	F-4		
TP1	E-4		
TP2	D-4		
TP30	E-4		
TP31	E-2		
TP32	E-3		
TP33	E-3		
TP34	F-4		
TP35	F-3		
TP60	D-2		

ADDRESS INFORMATION

F4 V OUT P.C. BOARD (VEP83352C)

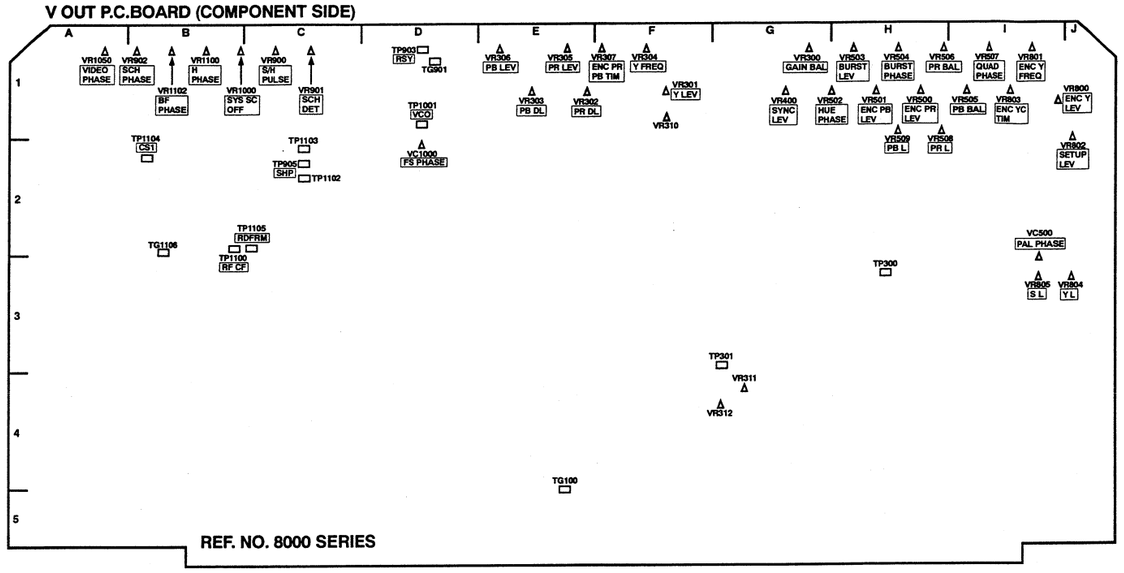


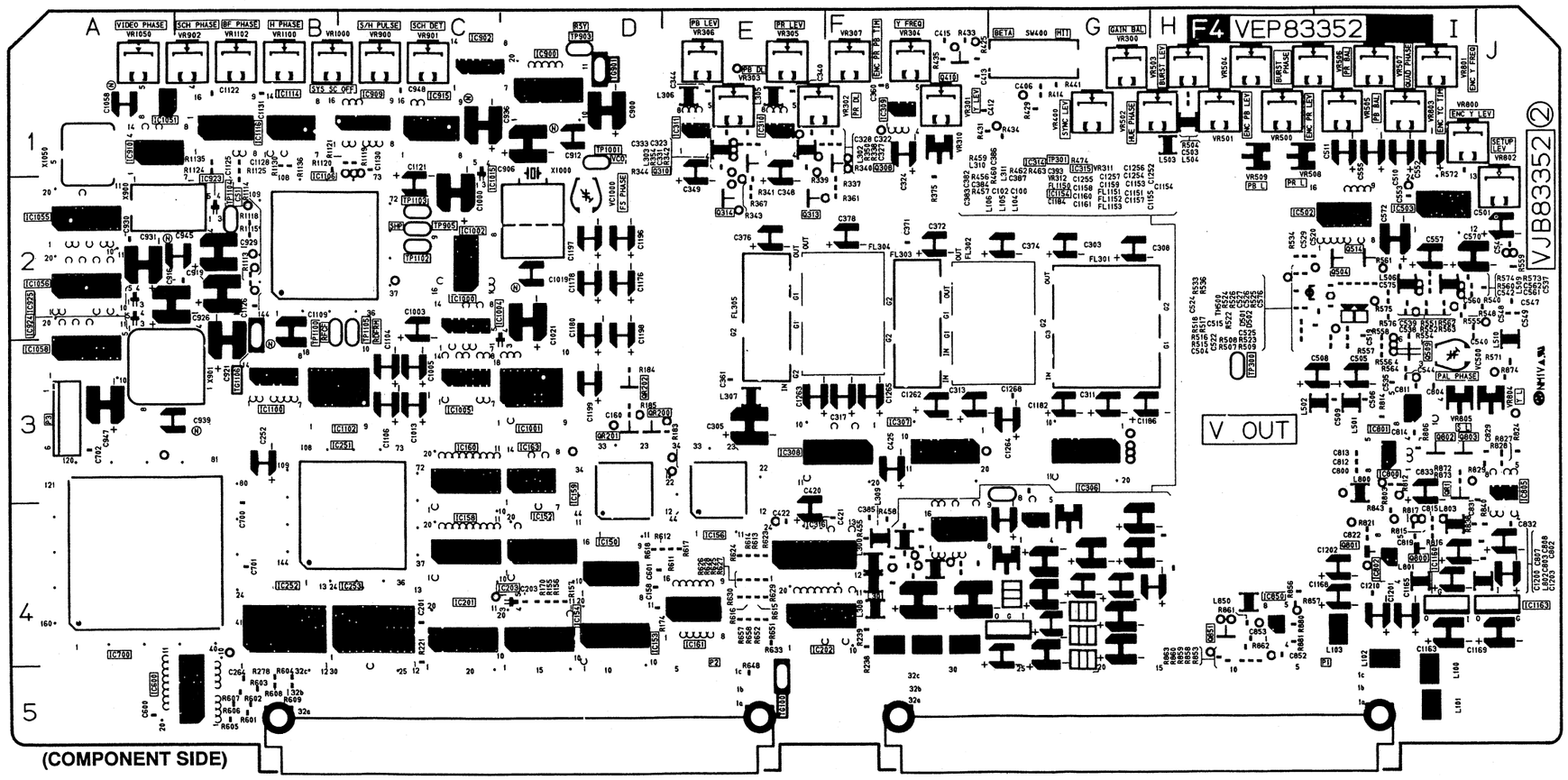
V OUT (FOIL SIDE)			
Transistors		IC1003	D-2
Q300	G-3	IC1053	A-2
Q301	G-3	IC1057	A-2
Q302	F-3	IC1103	B-1
Q303	F-3	IC1107	B-2
Q304	F-3	IC1108	C-2
Q305	E-3	IC1113	B-2
Q306	G-2	IC1115	B-1
Q307	F-2	IC1150	D-2
Q309	F-2	IC1151	D-2
Q311	F-1	IC1152	D-3
Q312	E-1	IC1153	G-3
Q315	F-2	IC1154	G-4
Q316	F-2	IC1155	H-3
Q317	E-2	IC1156	D-2
Q318	E-2	IC1157	D-2
Q319	E-2	IC1158	D-3
Q320	F-4	IC1159	D-3
Q400	G-1	IC1160	I-4
Q401	G-1	IC1161	I-4
Q402	G-1	IC1162	I-4
Q403	H-1	IC1163	J-4
Q404	G-1	IC1165	F-3
Q405	G-2	IC1166	E-3
Q406	F-1	IC1167	G-3
Q407	F-1	IC1168	F-3
Q408	H-2	**Test Points**	
Q409	G-1	TG100	E-5
Q500	H-2	TG901	D-1
Q501	I-2	TG1106	B-2
Q502	H-2	TP300	H-3
Q503	H-2	TP301	G-3
Q506	I-2	TP903	D-1
Q506	I-2	TP905	C-2
Q507	I-2	TP1001	D-1
Q508	H-1	TP1100	B-2
Q510	I-2	TP1102	C-2
Q511	I-2	TP1103	C-2
Q512	I-2	TP1104	B-2
Q513	I-2	TP1105	C-2
Q804	I-3	**Adjustments**	
Q806	I-4	VC500	I-3
Q807	I-3	VC1000	D-2
Q850	H-4	VR300	G-1
Q1000	C-2	VR301	F-1
Q1001	D-2	VR302	F-1
Q1002	D-2	VR304	F-1
Transistor & Resistors		VR305	E-1
QR300	E-2	VR306	E-1
QR301	F-2	VR307	F-1
QR500	H-2	VR400	G-1
QR501	H-1	VR500	H-1
QR801	J-1	VR501	H-1
QR802	I-3	VR502	H-1
QR803	J-3	VR503	H-1
Integrated Circuits		VR504	H-1
IC151	D-4	VR505	I-1
IC157	D-3	VR506	H-1
IC164	E-3	VR507	I-1
IC200	C-4	VR800	J-1
IC250	B-3	VR801	I-1
IC254	B-3	VR802	J-2
IC255	B-4	VR803	I-1
IC256	B-4	VR900	C-1
IC257	B-5	VR901	C-1
IC300	H-3	VR902	B-1
IC301	H-3	VR1000	B-1
IC312	F-2	VR1050	A-1
IC313	H-3	VR1100	B-1
IC500	I-3	VR1102	B-1
IC601	E-4	**Connectors**	
IC602	E-4	P1	G-5
IC603	E-4	P2	C-5
IC604	A-3	P3	A-3
IC701	A-4		
IC702	A-4		
IC904	C-1		
IC908	C-1		
IC913	A-2		
IC916	A-3		

ADDRESS INFORMATION

3–5

V OUT P.C.BOARD (COMPONENT SIDE)





V OUT (COMPONENT SIDE)			
Transistors		IC1114	B-1
Q308	F-1	IC1116	B-1
Q310	E-1	IC1154	G-4
Q313	E-2	IC1160	I-4
Q314	E-2	IC1163	J-4
Q410	F-1	**Test Points**	
Q504	I-2	TG100	E-5
Q509	I-3	TG901	D-1
Q514	I-2	TG1106	B-3
Q800	I-4	TP300	H-3
Q801	I-4	TP301	G-4
Q802	I-2	TP903	D-1
Q803	I-3	TP905	C-2
Q851	H-4	TP1001	D-1
Transistor & Resistors		TP1100	B-2
QR1	I-3	TP1102	C-2
QR200	D-3	TP1103	C-2
QR201	D-3	TP1104	B-2
QR202	D-3	TP1105	C-2
Integrated Circuits		**Adjustments**	
IC150	D-4	VC500	I-3
IC152	D-4	VC1000	D-2
IC153	D-4	VR300	G-1
IC154	D-4	VR301	F-1
IC156	E-3	VR302	F-1
IC158	C-4	VR303	E-1
IC159	D-3	VR304	F-1
IC160	C-3	VR305	E-1
IC161	E-4	VR306	E-1
IC163	D-3	VR307	F-1
IC201	C-4	VR310	F-1
IC202	F-4	VR311	G-4
IC203	D-4	VR312	G-4
IC251	C-3	VR400	G-1
IC252	B-4	VR500	H-1
IC253	C-4	VR501	H-1
IC306	G-3	VR502	G-1
IC307	F-3	VR503	H-1
IC308	E-3	VR504	H-1
IC309	F-1	VR505	I-1
IC310	E-1	VR506	I-1
IC311	E-1	VR507	I-1
IC314	G-4	VR508	H-1
IC315	G-4	VR509	H-1
IC316	E-4	VR800	I-1
IC502	I-2	VR801	I-1
IC503	I-2	VR802	J-2
IC600	B-5	VR803	I-1
IC700	A-4	VR804	J-3
IC800	I-3	VR805	I-3
IC801	I-3	VR900	C-1
IC802	I-4	VR901	C-1
IC805	J-3	VR902	B-1
IC850	H-4	VR1000	B-1
IC900	D-1	VR1050	A-1
IC902	C-1	VR1100	B-1
IC909	C-1	VR1102	B-1
IC910	A-1	**Connectors**	
IC915	C-1	P1	I-4
IC923	B-2	P2	E-4
IC924	A-2	P3	A-3
IC925	A-2		
IC1000	C-2		
IC1001	D-3		
IC1002	C-2		
IC1004	D-2		
IC1005	C-3		
IC1015	C-2		
IC1051	A-1		
IC1055	A-2		
IC1056	A-2		
IC1058	A-3		
IC1100	B-3		
IC1102	C-3		
IC1106	B-2		

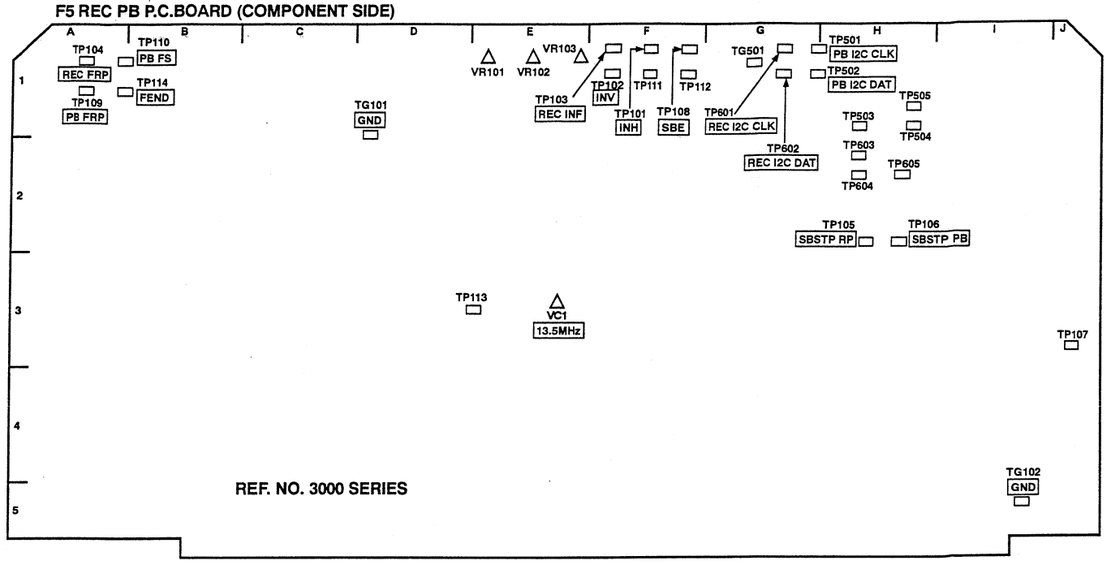
ADDRESS INFORMATION

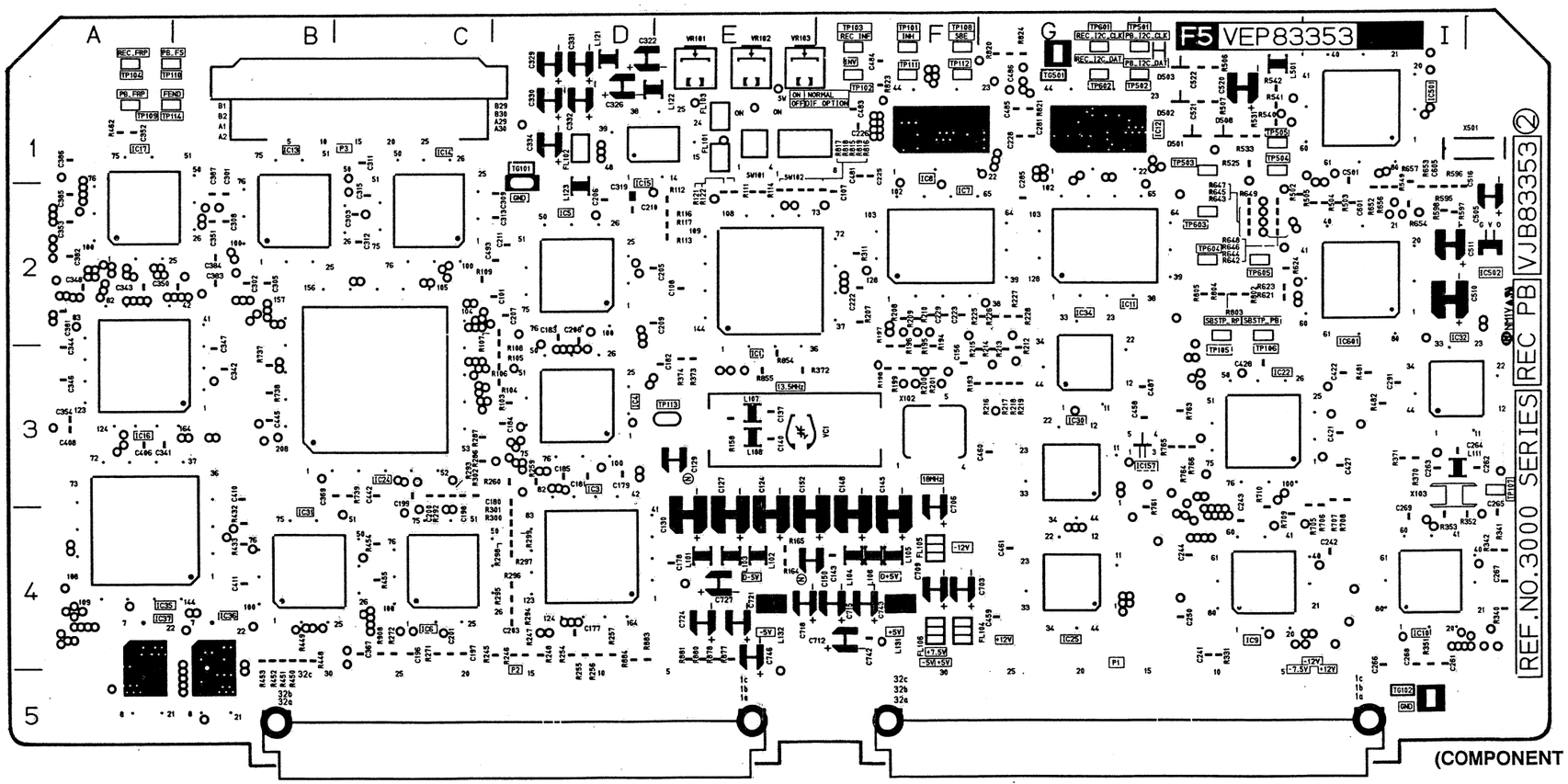
F5 REC PB P.C.BOARD (VEP83353A) (FOR NTSC)
(VEP83353B) (FOR PAL)

F5 REC PB (COMPONENT SIDE)					
Integrated Circuits		IC35	A-4	TP114	A-1
IC1	E-2	IC36	B-4	TP501	G-1
IC3	D-4	IC37	A-4	TP502	G-1
IC4	D-3	IC157	H-3	TP503	H-1
IC5	D-2	IC501	I-1	TP504	H-1
IC6	C-4	IC502	J-2	TP505	H-1
IC7	F-2	IC601	I-2	TP601	G-1
IC8	F-1	**Test Points**		TP602	G-1
IC9	H-4	TG101	D-1	TP603	H-2
IC10	I-4	TG102	I-5	TP604	H-2
IC11	G-2	TG501	G-1	TP605	H-2
IC12	G-1	TP101	F-1	**Adjustments**	
IC13	B-2	TP102	F-1	VC1	E-3
IC14	C-2	TP103	F-1	VR101	E-1
IC15	D-1	TP104	A-1	VR102	E-1
IC16	A-3	TP105	H-2	VR103	E-1
IC17	A-2	TP106	H-2	**Connectors**	
IC22	H-3	TP107	J-3	P1	G-5
IC24	C-3	TP108	F-1	P2	D-5
IC25	G-4	TP109	A-1	P3	C-1
IC30	G-3	TP110	A-1		
IC31	B-4	TP111	F-1		
IC32	I-3	TP112	F-1		
IC34	G-3	TP113	E-3		

ADDRESS INFORMATION

F5 REC PB P.C.BOARD (COMPONENT SIDE)



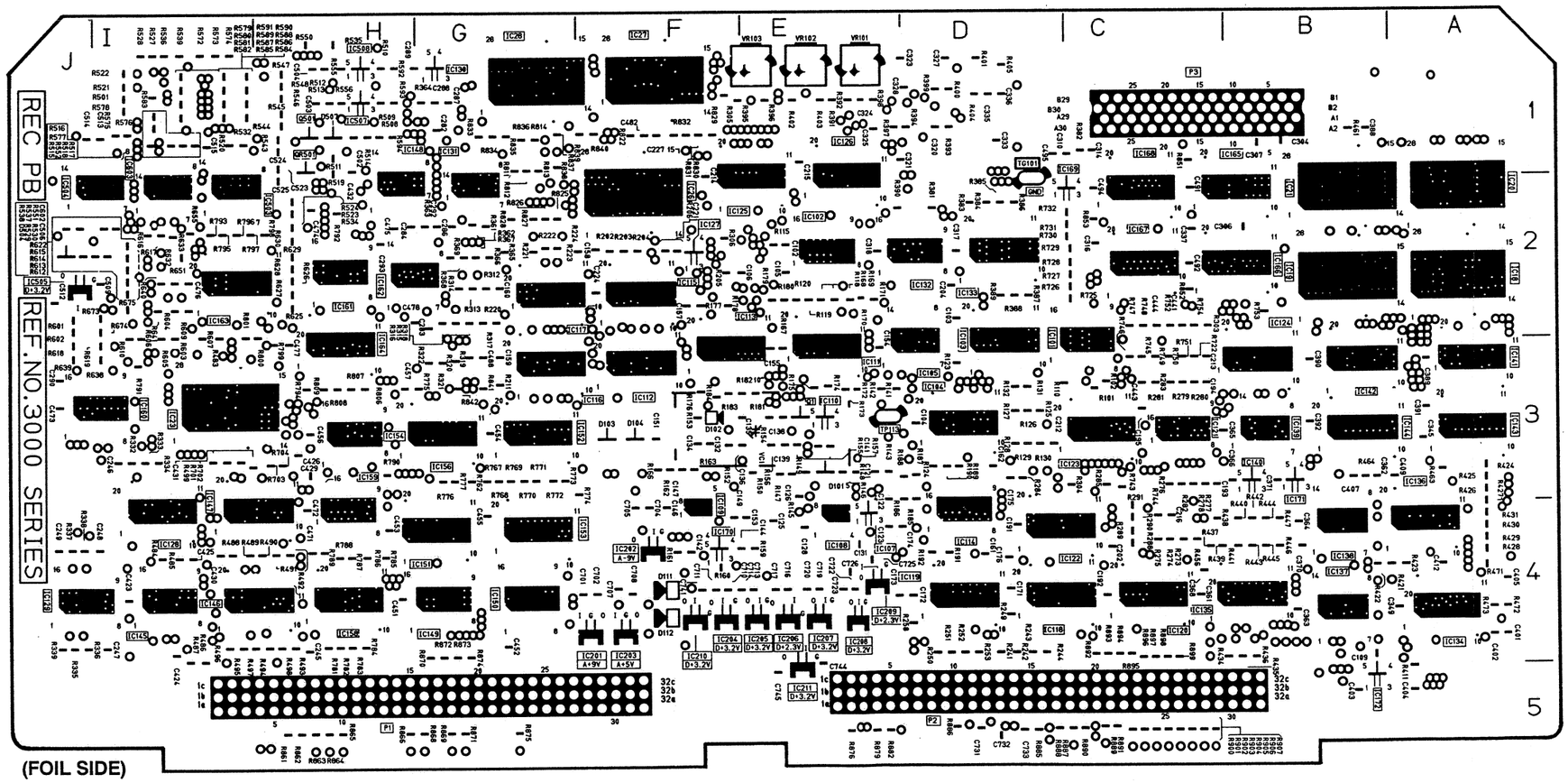


(COMPONENT SIDE)

F5 REC PB (FOIL SIDE)

Transistors	
Q501	H-1
Transistor & Resistors	
QR501	H-1
Integrated Circuits	
IC18	A-2
IC19	B-2
IC20	A-2
IC21	B-2
IC23	I-3
IC26	F-2
IC27	F-1
IC28	G-1
IC101	C-2
IC102	E-2
IC103	D-2
IC104	D-3
IC105	D-2
IC107	E-4
IC108	E-4
IC109	F-4
IC110	E-3
IC111	E-3
IC112	F-3
IC113	F-3
IC114	D-4
IC115	F-2
IC116	G-3
IC117	G-2
IC118	D-4
IC119	D-4
IC120	C-4
IC121	C-3
IC122	C-4
IC123	C-3
IC124	B-3
IC125	E-1
IC126	E-1
IC127	F-2
IC128	I-4
IC129	J-4
IC130	G-1
IC131	G-2
IC132	D-2
IC133	D-2
IC134	A-4
IC135	B-4
IC136	A-4
IC137	B-4
IC138	B-4
IC139	B-3
IC140	B-3
IC141	A-3
IC142	B-3
IC143	A-3
IC144	B-3
IC145	I-4
IC146	I-4
IC147	I-4
IC148	H-2
IC149	G-4
IC150	G-4
IC151	G-4
IC152	G-3
IC153	G-4
IC154	H-3
IC156	G-3
IC158	H-4
IC159	H-3
IC160	I-3
IC161	H-2
IC162	H-2
IC163	I-2
IC164	H-3
IC165	B-2
IC166	B-2
IC167	C-2
IC168	C-2
IC169	C-2
IC170	F-4
IC171	B-3
IC172	B-5
IC201	F-4
IC202	F-4
IC203	F-4
IC204	F-4
IC205	E-4
IC206	E-4
IC207	E-4
IC208	E-4
IC209	E-4
IC210	F-4
IC211	E-5
IC503	I-2
IC504	J-2
IC505	J-2
IC507	H-1
IC508	H-1
IC603	I-2
Test Points	
TG101	D-2
TP113	E-3
Adjustments	
VC1	E-3
VR101	E-1
VR102	E-1
VR103	E-1
Connectors	
P1	H-5
P2	D-5
P3	C-1

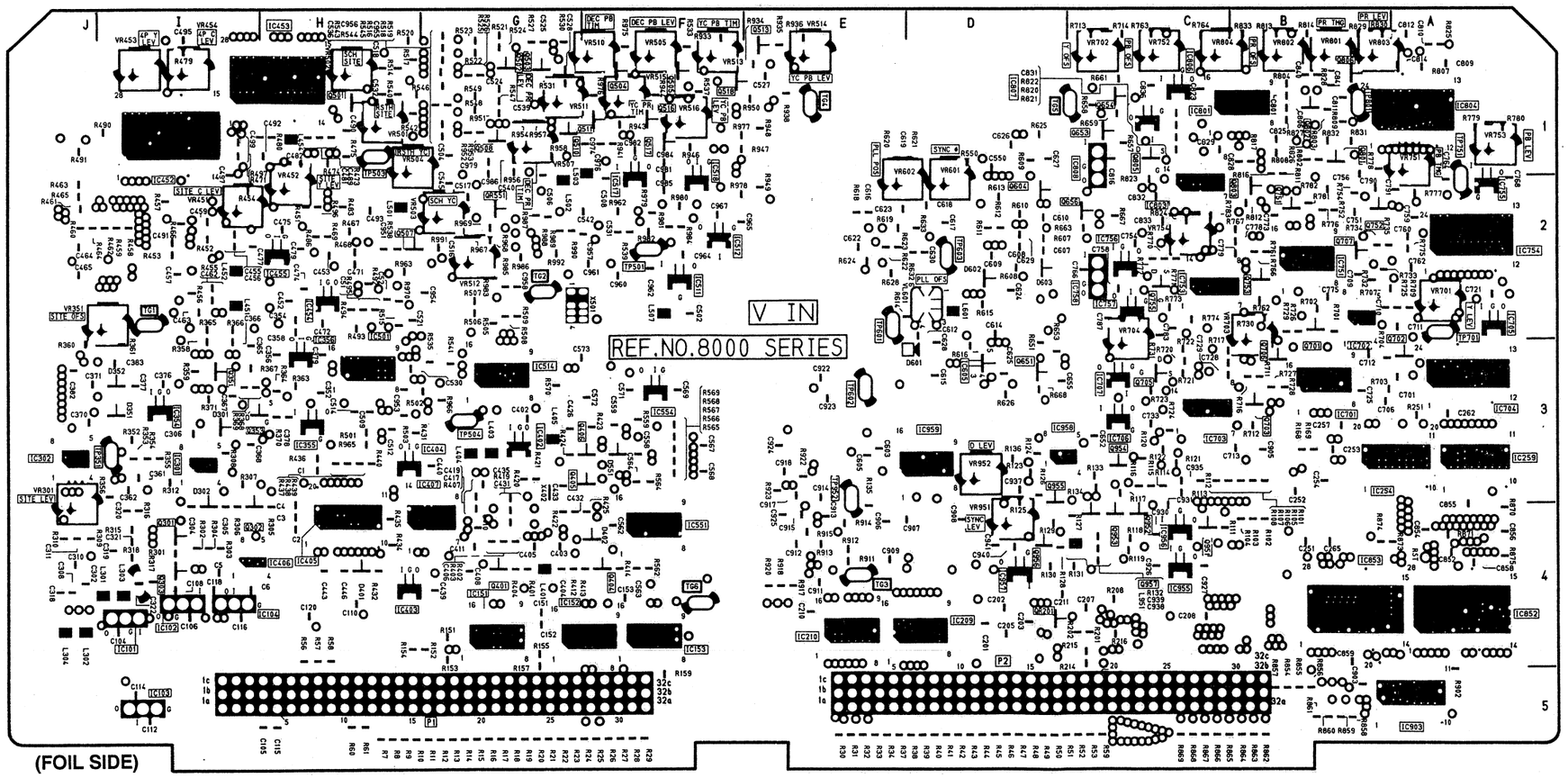
ADDRESS INFORMATION



(FOIL SIDE)

3–7

F6 V IN P.C.BOARD (VEP83397A) – for AJ-D640/650/750
(VEP83397B) – for AJ-D640/650/750P



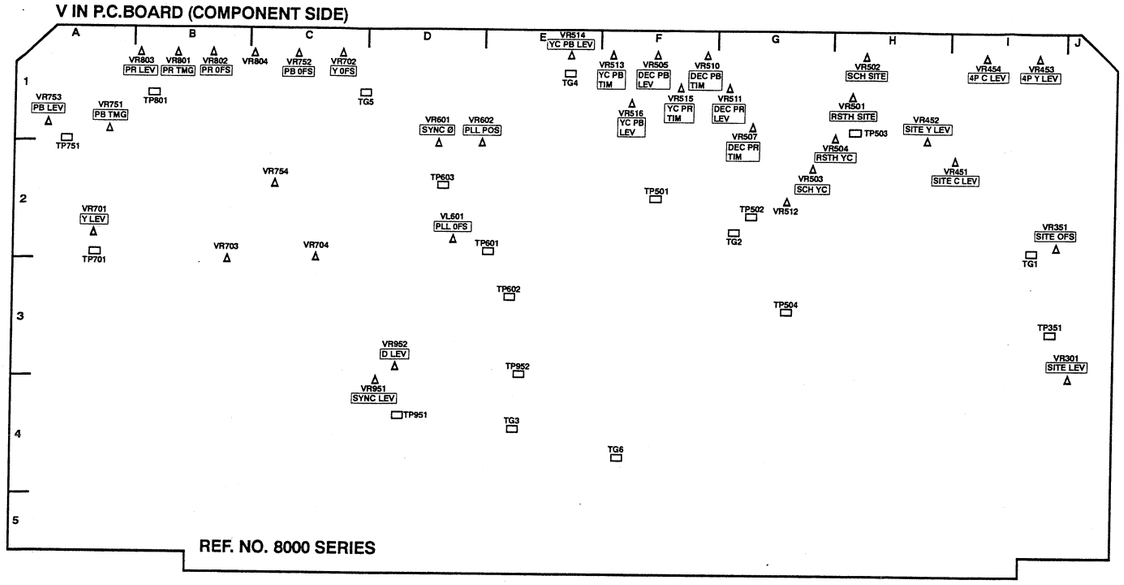
(FOIL SIDE)

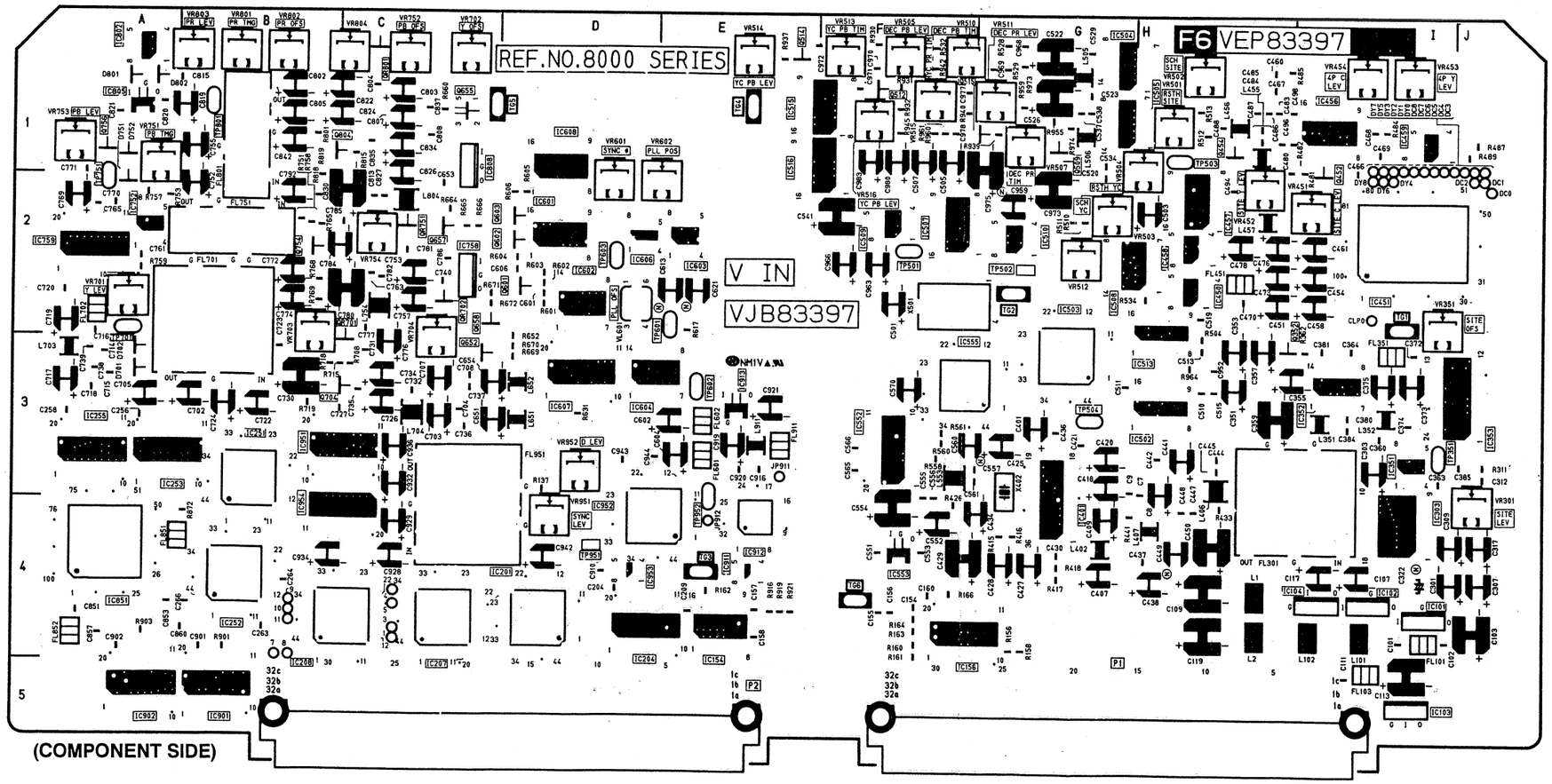
V IN (FOIL SIDE)			
Transistors		IC518	F-2
Q301	I-4	IC551	F-4
Q302	I-4	IC554	F-3
Q303	I-4	IC605	D-3
Q351	I-3	IC701	B-3
Q353	I-3	IC702	B-2
Q401	G-4	IC703	C-3
Q404	F-4	IC704	A-3
Q405	G-3	IC705	A-2
Q406	F-3	IC706	C-3
Q501	H-1	IC707	C-3
Q502	G-1	IC751	B-2
Q503	G-1	IC753	C-2
Q504	F-1	IC754	A-2
Q505	F-1	IC755	A-2
Q507	H-2	IC756	C-2
Q508	G-1	IC757	C-2
Q510	G-1	IC758	C-2
Q511	G-1	IC801	C-1
Q513	E-1	IC803	C-2
Q516	F-1	IC804	A-1
Q517	F-1	IC806	C-1
Q518	F-1	IC807	C-1
Q604	D-2	IC852	A-4
Q651	D-3	IC853	B-4
Q653	C-1	IC903	A-5
Q654	C-1	IC955	C-4
Q656	C-2	IC956	C-4
Q701	B-3	IC957	D-4
Q702	A-3	IC958	D-3
Q703	B-3	IC959	D-3
Q705	C-3	**Test Points**	
Q706	B-3	TG1	I-2
Q707	B-2	TG2	G-2
Q751	B-2	TG3	E-4
Q752	B-2	TG4	E-1
Q753	B-2	TG5	D-1
Q755	C-2	TG6	F-4
Q801	B-1	TP351	I-3
Q802	B-1	TP501	F-2
Q803	B-2	TP503	H-1
Q805	C-1	TP504	G-3
Q806	B-1	TP601	E-2
Q951	C-4	TP602	E-3
Q952	C-4	TP603	D-2
Q953	C-4	TP751	A-1
Q954	C-3	TP801	B-1
Q955	D-3	TP952	E-3
Q956	D-4	**Adjustments**	
Q957	C-4	VR301	J-3
Transistor & Resistors		VR351	I-2
QR201	D-4	VR452	H-1
QR551	G-2	VR453	I-1
Integrated Circuits		VR454	I-1
IC101	I-4	VR501	H-1
IC102	I-4	VR502	H-1
IC103	I-5	VR504	H-1
IC104	I-4	VR505	F-1
IC151	G-4	VR507	G-1
IC152	G-4	VR510	F-1
IC153	F-4	VR511	G-1
IC209	D-4	VR512	G-2
IC210	E-4	VR513	F-1
IC254	A-2	VR514	E-1
IC259	A-3	VR515	F-1
IC301	I-3	VR516	F-1
IC302	J-3	VR701	A-2
IC354	I-3	VR702	C-1
IC355	H-3	VR703	B-1
IC356	H-3	VR704	C-2
IC402	G-3	VR751	A-1
IC403	H-4	VR752	C-1
IC404	H-3	VR753	A-1
IC405	H-4	VR754	C-1
IC406	I-4	VR801	B-1
IC407	G-4	VR802	B-1
IC452	I-1	VR803	B-1
IC453	H-1	VR804	C-1
IC454	H-2	VR951	D-4
IC455	H-2	VR952	D-3
IC501	H-3	**Connectors**	
IC511	F-2	P1	G-5
IC512	F-2	P2	D-5
IC514	G-3		
IC517	F-2		

ADDRESS INFORMATION

3–8

V IN P.C.BOARD (COMPONENT SIDE)





(COMPONENT SIDE)

V IN (COMPONENT SIDE)

Transistors	
Q352	I-2
Q452	I-1
Q454	H-1
Q509	G-1
Q512	F-1
Q514	E-1
Q515	F-1
Q601	D-2
Q602	C-2
Q603	C-2
Q652	C-3
Q655	C-1
Q657	C-2
Q658	C-2
Q704	B-3
Q754	B-2
Q756	A-1
Q804	C-1
Transistor & Resistors	
QR701	C-2
QR702	C-2
QR751	C-2
QR801	C-1
Integrated Circuits	
IC101	I-4
IC102	I-4
IC103	I-5
IC104	I-4
IC154	E-4
IC156	F-4
IC201	C-4
IC204	D-4
IC207	C-4
IC208	B-4
IC251	B-3
IC252	B-4
IC253	A-3
IC255	A-3
IC303	I-4
IC351	I-3
IC352	I-3
IC353	J-3
IC401	G-4
IC450	H-2
IC451	I-2
IC456	I-1
IC457	H-2
IC458	H-2
IC459	I-1
IC502	H-3
IC503	G-2
IC504	G-1
IC505	H-1
IC507	F-2
IC508	G-2
IC509	F-2
IC510	G-2
IC513	H-3
IC515	E-1
IC516	E-1
IC552	F-3
IC553	F-4
IC555	F-3
IC601	D-2
IC602	D-2
IC603	E-2
IC604	D-3
IC606	D-2
IC607	D-3
IC608	D-1
IC752	A-2
IC758	C-2
IC759	A-2
IC802	A-1
IC805	A-1
IC808	C-1
IC851	A-4
IC901	B-5
IC902	A-5
IC911	E-4
IC912	E-4
IC913	E-3
IC951	B-3
IC952	D-4
IC953	D-4
IC954	B-4
Test Points	
TG1	I-2
TG2	G-2
TG3	E-4
TG4	E-1
TG5	C-1
TG6	F-4
TP351	I-3
TP501	F-2
TP502	G-2
TP503	H-1
TP504	G-3
TP601	E-2
TP602	E-3
TP603	D-2
TP701	A-2
TP751	A-2
TP801	B-1
TP951	D-4
TP952	E-4
Adjustments	
VL601	D-2
VR301	J-3
VR351	I-2
VR451	I-2
VR452	H-2
VR453	I-1
VR454	I-1
VR501	H-1
VR502	H-1
VR503	G-2
VR504	H-1
VR505	F-1
VR507	G-2
VR510	F-1
VR511	G-1
VR512	G-2
VR513	F-1
VR514	E-1
VR515	F-1
VR516	F-2
VR601	D-1
VR602	D-1
VR701	A-2
VR702	C-1
VR703	B-2
VR704	C-3
VR751	A-1
VR752	C-2
VR753	A-1
VR754	C-2
VR801	B-1
VR802	B-1
VR803	B-1
VR804	C-1
VR951	D-4
VR952	D-3
Connectors	
P1	G-5
P2	E-5

ADDRESS INFORMATION

3–8

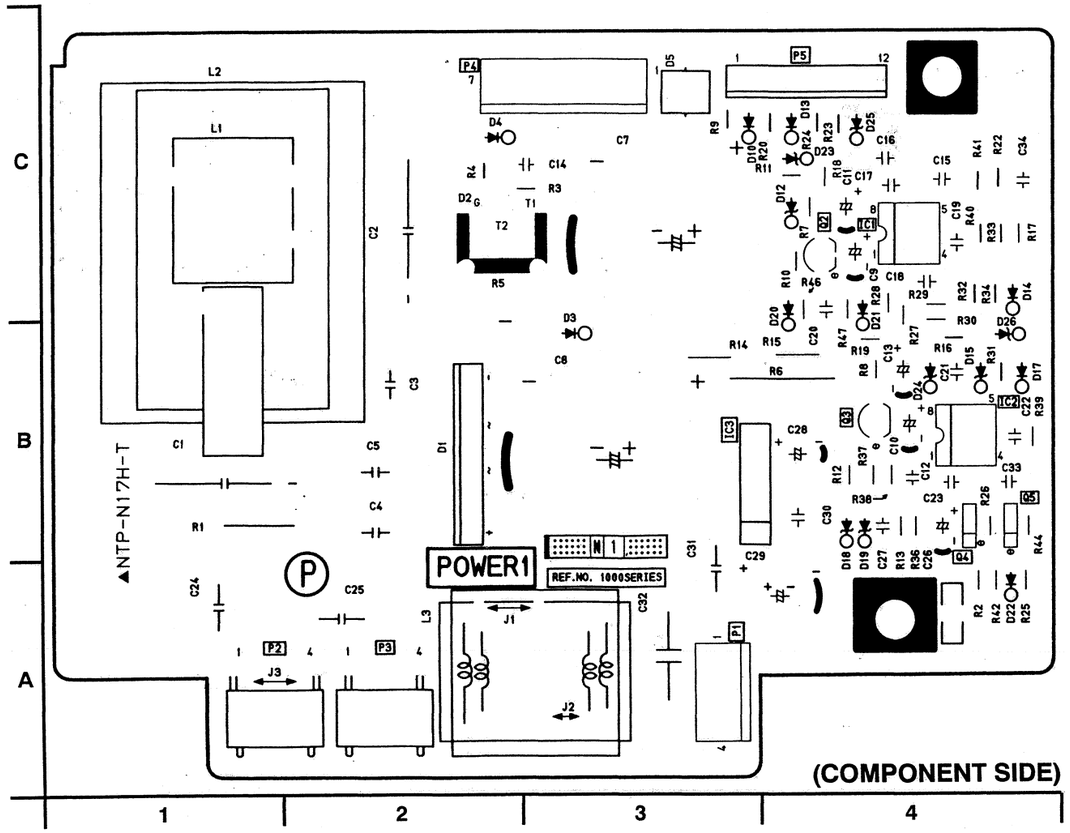
POWER 1 P.C.BOARD (VEP81074A) – FOR NTSC
(VEP81074B) – FOR PAL

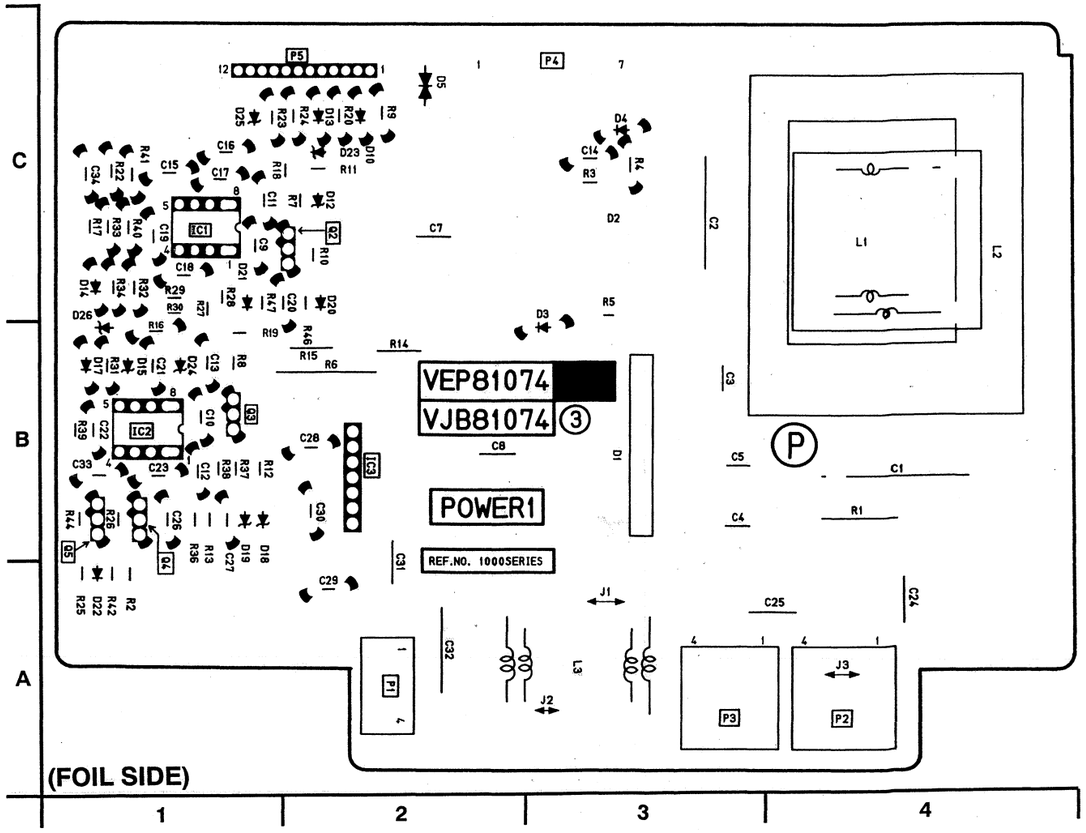
POWER 1 (COMPONENT SIDE)			
Transistors		**Connector**	
Q1002	C-4	P1001	A-3
Q1003	B-4	P1002	A-1
Q1004	B-4	P1003	A-2
Q1005	B-4	P1004	C-2
Integrated Circuit		P1005	C-3
IC1001	C-4		
IC1002	B-4		
IC1003	B-3		

ADDRESS INFORMATION

POWER 1 (FOIL SIDE)			
Transistors		**Connector**	
Q1002	C-2	P1001	A-2
Q1003	B-1	P1002	A-4
Q1004	B-1	P1003	A-3
Q1005	B-1	P1004	C-3
Integrated Circuit		P1005	C-1
IC1001	C-1		
IC1002	B-1		
IC1003	B-2		

ADDRESS INFORMATION





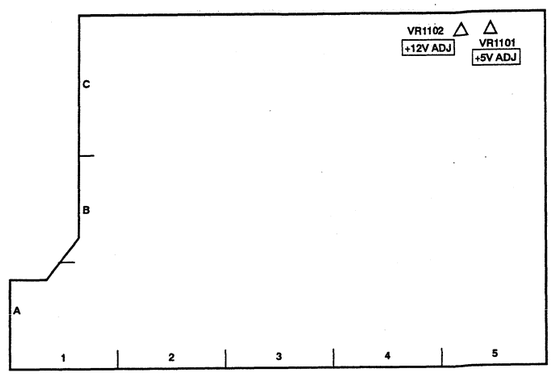
POWER 2 P.C.BOARD (VEP81075A) – FOR NTSC
(VEP81075B) – FOR PAL

POWER 2 (FOIL SIDE)			
Transistors		Adjustment	
Q1011	C-2	VR1001	C-1
Q1012	C-4	VR1002	C-1
Q1013	C-5	Connector	
Q1014	C-1	P1011	A-2
Q1015	C-1	P1012	A-2
Q1016	C-4	P1013	A-3
Q1017	B-5	P1014	A-5
Q1018	B-5	P1015	C-2
Q1019	B-2	P1016	C-4
Integrated Circuit			
IC1011	B-1		
IC1012	B-1		

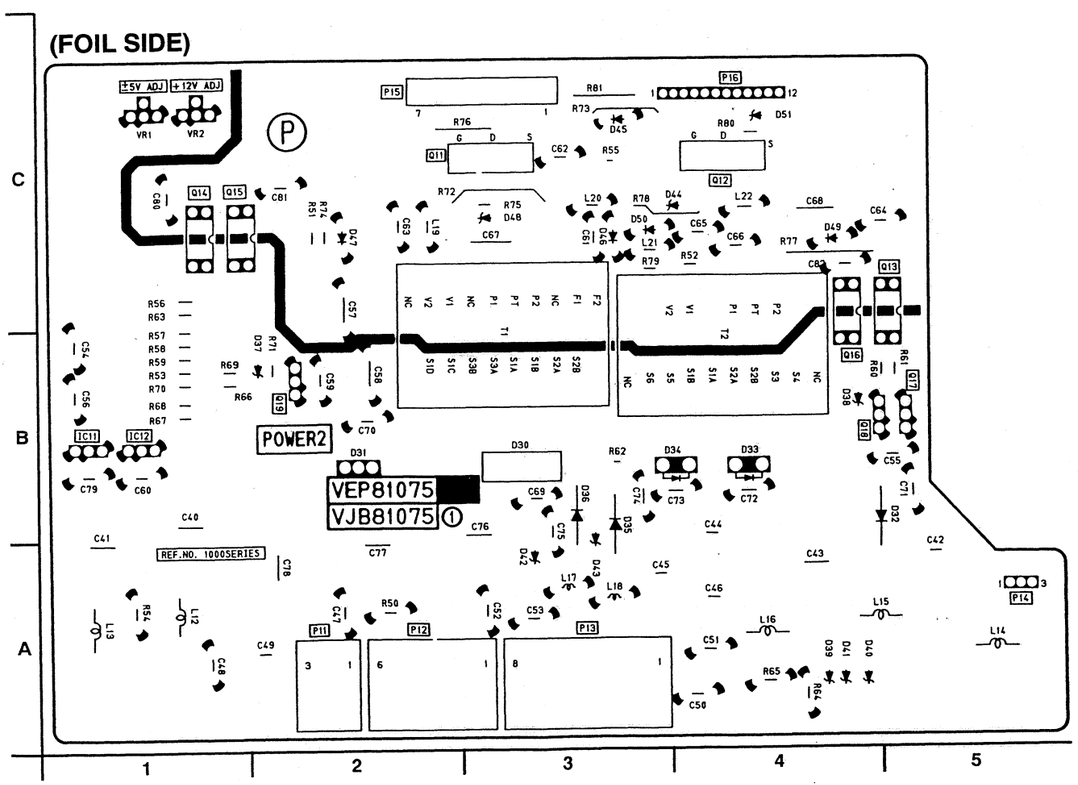
ADDRESS INFORMATION

POWER 2 (COMPONENT SIDE)			
Transistors		Adjustment	
Q1011	C-3	VR1001	C-5
Q1012	C-2	VR1002	C-5
Q1013	C-1	Connector	
Q1014	C-5	P1011	A-4
Q1015	C-4	P1012	A-3
Q1016	C-2	P1013	A-3
Q1017	B-1	P1014	A-1
Q1018	B-1	P1015	C-3
Q1019	B-4	P1016	C-2
Integrated Circuit			
IC1011	B-5		
IC1012	B-5		

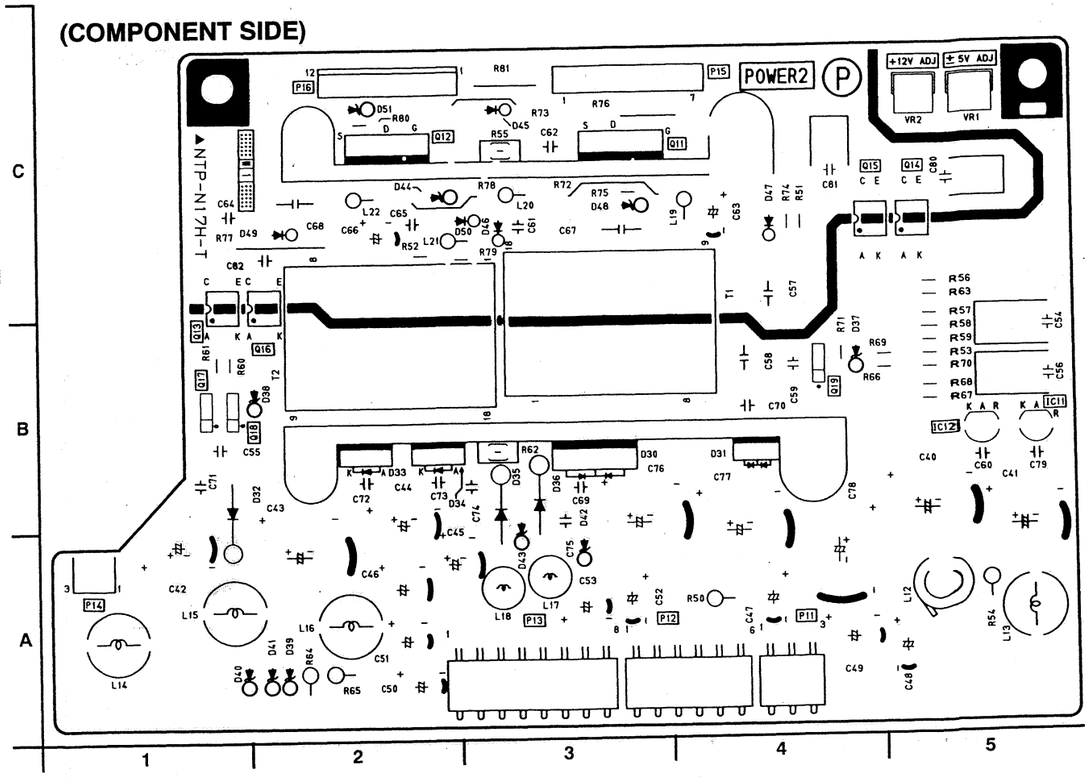
ADDRESS INFORMATION



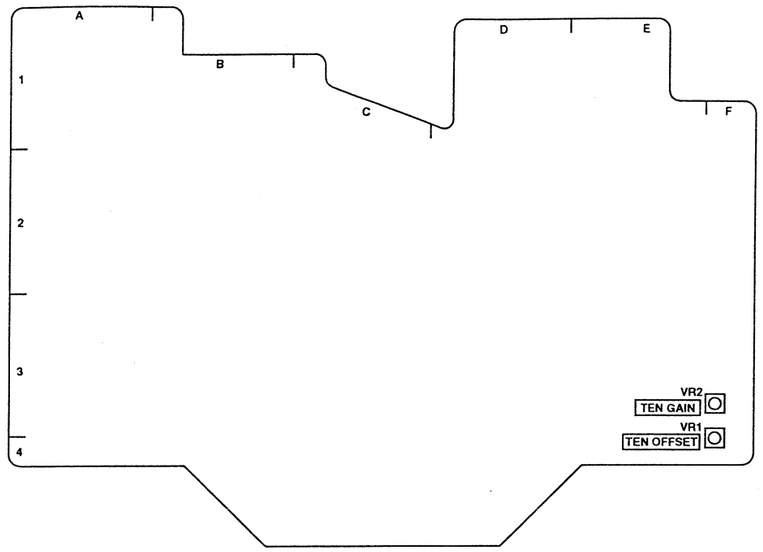
(FOIL SIDE)



(COMPONENT SIDE)



MECHA I/F P.C.BOARD (VEP82216A)

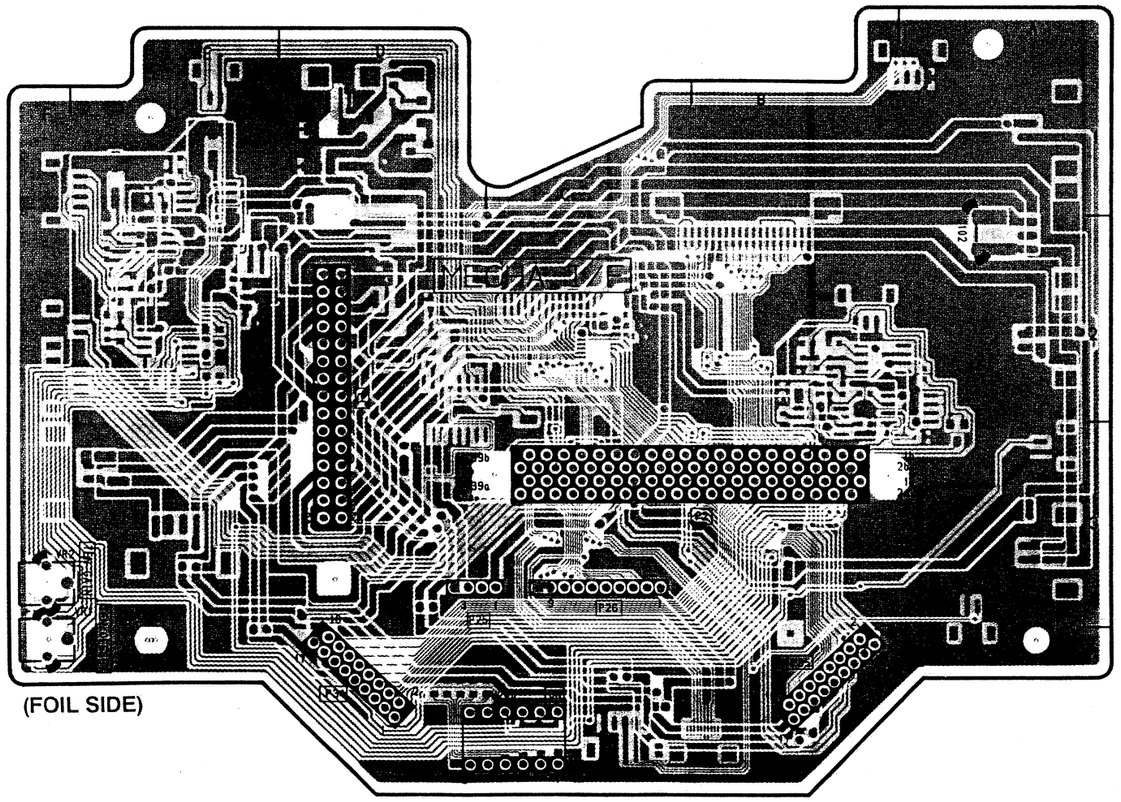


MECHANISM INTERFACE C.B.A. (FOIL SIDE)	
Adjustment	
VR1	F-4
VR2	F-3
Connector	
P1	D-2
P2	B-3
P25	D-3
P26	C-3
P34	D-4
P35	B-4

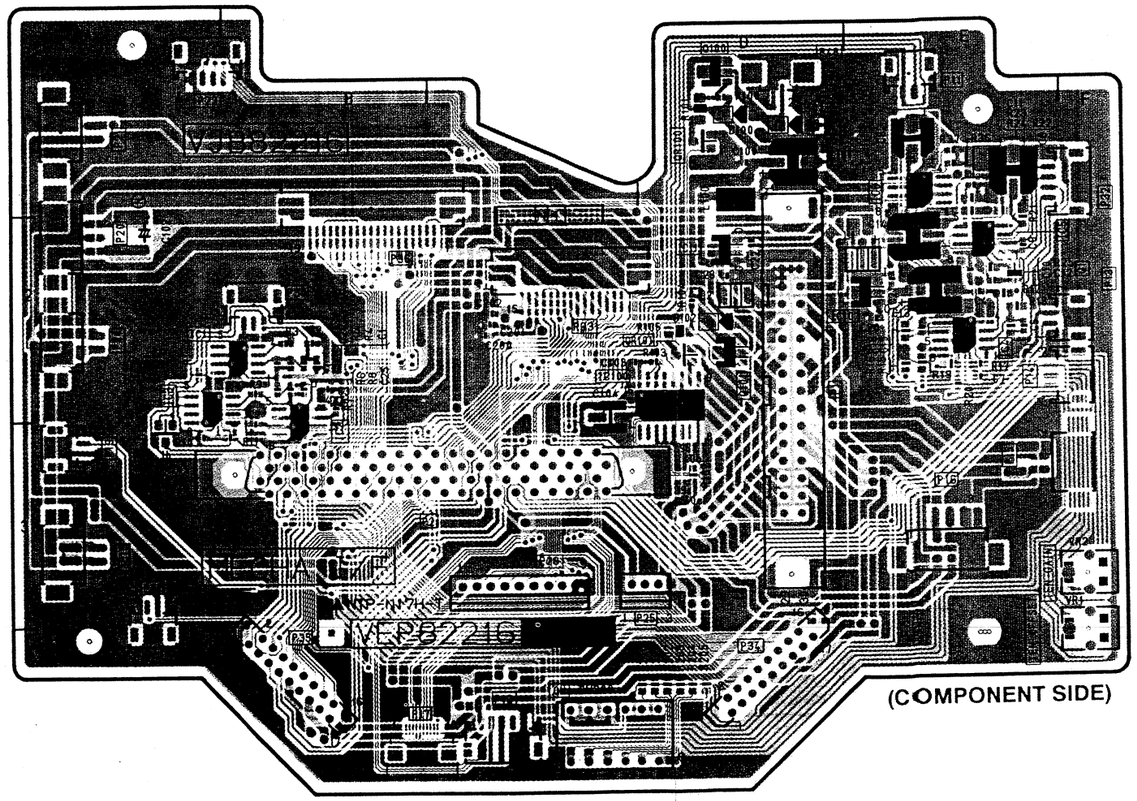
ADDRESS INFORMATION

MECHANISM INTERFACE C.B.A. (COMPONENT SIDE)			
Transistor		P11	E-1
Q1	F-2	P12	C-4
Q100	D-1	P13	F-2
Q101	D-2	P14	E-2
Transistor & Resistor		P15	E-3
QR100	D-1	P16	E-3
QR101	D-2	P17	B-4
Integrated Circuit		P18	A-3
IC1	A-2	P19	A-3
IC2	B-3	P20	A-2
IC3	A-2	P21	A-1
IC4	E-2	P22	A-1
IC5	F-2	P24	A-2
IC6	E-1	P25	D-3
IC10	E-2	P26	C-3
IC11	D-2	P30	B-2
IC100	C-2	P32	F-1
Adjustment		P33	C-2
VR1	F-3	P34	D-4
VR2	F-3	P35	B-4
Connector		P36	B-2
P1	D-2	P41	A-3
P2	B-3	P48	D-1

ADDRESS INFORMATION



(FOIL SIDE)



(COMPONENT SIDE)

3–18